神奈川県立博物館自然部門資料目録（7）

Gerard Ramon Case 軟骨魚類化石標本目録
第2集　中生代・新生代軟骨魚類化石

CATALOGUE OF THE CHONDRICHTHYAN SPECIMENS GERARD RAMON CASE
COLLECTION OF THE KANAGAWA PREFECTURAL MUSEUM
PART 2 MESOZOIC AND CENOZOIC CHONDRICHTHYES

神奈川県立博物館

平成6年3月

KANAGAWA PREFECTURAL MUSEUM

Naka-ku, Yokohama, Japan

Mar., 1994

EXPLANATION OF THE PLATES 1－4

図版 1－4

Plate 1 (× 1.0)

1.2.3.
No. 7292
Name: *Odontaspis cuspidata* Agassiz
Formation: unknown
Locality: Lee Creek Mine, S side of Pamlico river,near Aurora,Beaufort Co., North Carolina, USA
Age: Tertiary

4.5.
No. 10183
Name: *Odontaspis winkleri* Leriche
Formation: Barton beds
Locality: Hampshire, England, UK
Age: Eocene

6.7.
No. 10086
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Brickworks at Rumst, Belgium
Age: Miocene

8.9.
No. 7324
Name: *Odontaspis* sp.
Formation: Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene (Burdigalian)

10.11.
No. 7284
Name: *Notorhynchus* cf. *N.primigenius* (Agassiz)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River,near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene

12.13.
No. 10136
Name: *Odontaspis* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)

14.15.
No. 10423
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Steendorp, Belgium
Age: Miocene

Plate 1

Plate 2 (× 1.0)

1.
No. 10401
Name: *Carcharocles* cf. *C.auriculatus* (Blainville)
Formation: unknown
Locality: Port Royal, South Carolina, USA
Age: Miocene

2.4.5.6.
No. 7276
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: North Carolina, USA
Age: Miocene

3.
No. 7296
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene

7.8.
No. 7291
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: North Carolina, USA
Age: Miocene

Plate 2

Plate 3 (× 1.0)

1.2.3.4.5.6.7.8.9.

No. 7319

Name: *Otodus obliqnus* Agassiz

Formation: unknown

Locality: Morocco

Age: Tertiary

Plate 3

Plate 4 (× 1.0)

1.
No. 7366
Name: *Myliobatis dixoni* Agassiz
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene

2.
No. 10683
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene (Ypresian)

3.
No. 10684
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi-Doaui, Morocco
Age: Eocene (Ypresian)

4.8.
No. 10646
Name: *Raja dux* Cope
(Dermal denticles)
Formation: Pungo River Marl Fm.
Locality: T.G.S. North Carolina, USA
Age: Middle Miocene

5.
No. 10672
Name: *Aetobatus* sp.
Formation: unknown
Locality: France
Age: Miocene

6.
No. 10644
Name: *Raja clavata* Agassiz
Formation: Red Crag
Locality: Suffolk, England, UK
Age: Pliocene

7.
No. 10699
Name: *Myliobatis* sp.
Formation: Aquia Fm.
Locality: Aquia Creek & Belvidere Beach, Virginia, USA
Age: Early Eocene

9.10.
No. 10648
Name: *Raja antiqua* Agassiz
(Osseous scute)
Formation: unknown
Locality: Red Crag, Suffolk, England, UK
Age: Eocene

11.
No. 10689
Name: *Myliobatis* sp.
Formation: Pungo River Fm.
Locality: Aurora(Lee Creek), North Carolina, USA
Age: Middle Miocene

12.
No. 10688
Name: *Myliobatis* sp.
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene

13.14.
No. 7304
Name: *Myliobatis* sp.
(Stinger tail barbs)
Formation: unknown
Locality: Morocco
Age: unknown

Plate 4

7366
1
2
3
4
5
6
AQUIA FM. M. EOC.
MARLBOROUGH
7
8
9
10
0530
LEE CREEK
11
12
13
14

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あ い さ つ

「ケース・コレクション」で知られるサメの歯化石コレクションは、平成元年度に本館が収集したものです。軟骨魚類化石の研究家で世界的に有名なアメリカニュージャージーに在住のGerard Ramon Case氏が30数年以上にわたってアメリカ、ヨーロッパ、アフリカなど世界各地にでかけ調査採集された資料で、古生代から新生代にいたる地質時代のサメ類やエイ類など軟骨魚類化石の大量な歯化石が主体となっています。

収蔵以来これらの標本の分類整理に着手し、これまでに整理作業の終えた古生代の資料については、「Gerard Ramon Case 軟骨魚類化石標本目録　第1集　古生代軟骨魚類化石」として1992年に刊行いたしました。引続き膨大な量の中生代と新生代の標本の分類、整理、登録を行なってきましたが、この作業もほぼ終了しましたので、ここに「Gerard Ramon Case 軟骨魚類化石標本目録　第2集　中生代・新生代軟骨魚類化石」を刊行するはこびとなりました。この目録も実物資料と比較できるようできる限り数多くの図版を挿入いたしました。本目録と第1集の古生代軟骨魚類化石目録が皆様の調査研究に広く利用され、いくらかでもお役に立つことになれば幸に存じます

この目録を刊行するにあたり、コレクションを快くお譲り下さり、しかもご来館いただき、標本の整理とメッセージを頂いた Gerard Ramon Case 氏に感謝申し上げます。コレクションの収集にご尽力下さり、目録の作成にあたりご指導を賜った横浜国立大学教育学部教授長谷川善和氏、さらに、目録原稿のご校閲と玉稿を賜った国立科学博物館地学研究部室長上野輝彌氏ならびに鶴見大学歯学部助教授後藤仁敏氏に対し、ここに感謝の意を表す次第です。

平成6年3月

神奈川県立博物館長

安　藤　雅　之

Foreword

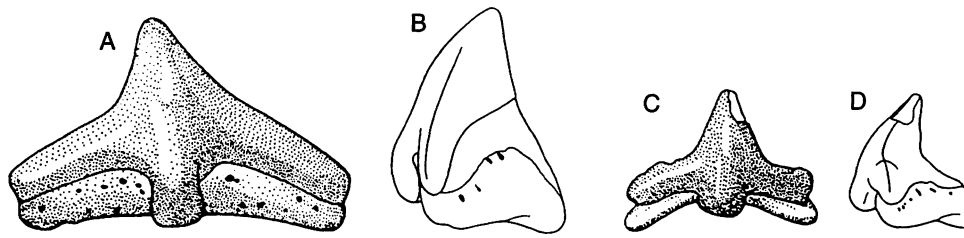
Primitive shark-like fishes first appeared in the Late Devonian age, and continued up until the Late Permian. They were replaced in the Triassic period by the "True sharks", which are still with us today in our planet's oceans, seas, bays, and estuaries.

From the Late Devonian, shark-like fishes developed two basic types of dentition; their teeth were the sharp, pointed types of the carnivores, while others had flat and rounded, crushing types for a diet of shells and shellfish.At the same time, early representatives of ghost sharks (chimaeroids), as well as skates and rays, were traveling the ancient seas, although they may not have appeared physically like our present day batoids.

Unfortunately, skeletal material of our ancient selachian ancestors were generally not preserved in the fossil record, with a few exceptions(*see Plate 5, Figures 7225 a, b, *Iniopteryx rushlaui* Zangerl and Case, and Plate 17, Figures 9294 a, b, *Romerodus orodontus* Zangerl).

Mostly, primitive or early selachians are represented in the fossil record (Devonian to Permian) by isolated teeth, of the shell crushing and carnivorous types. However, in this last century, many important finds of the carbonized skeletons of several species of shark-like fishes have come to light, and are now being published in scientific journals all over the world, giving us a knowledge of what the whole fish looked like.

There were many grotesque types of shark-like fishes, which we at the present time have not discovered their carbonized skeletons, such as the edestid group, particularly, *Helicoprion bessonowi* Karpinsky. The teeth of this primitive type have been discovered, but, at present it is not possible to discern how this dentition fits into the mouth of *Helicoprion*, or for that matter, why did the teeth not fall out, as normally shark teeth do, from constant usage. In *Helicoprion*, the teeth were replaced -- but, none were lost! Thus giving us a lengthy growth ring of teeth, most of which were probably non-functional.



Cretorectolobus olsoni Case 1987

There are other mysteries of ancient sharks that remain to be solved; such as the "feathery" denticles of *Listracanthus* (*see Plate 33, Figure 9293b) and the solid "Jello-mold" denticles of *Petrodus* (*see Plate 31,Figure 7125). These so-called denticles remain a mystery - as to where on the fishes body they are positioned. Their function is no doubt to act as a protection of some vital area of the corpus; but what we do not know basically, is which type selachian they belong to; and whether *Listracanthus* and *Petrodus* (which are most always found in association in the fossil record) are even related.

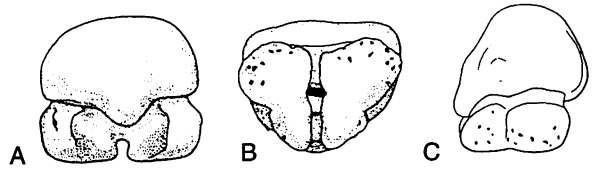
All this changed at the beginning of the Cenozoic period (Jurassic) when the "True sharks"(as well as skates, rays, sawfiches, and chimaeras) evolved. Even though few skeletons have been found fossilized during the Jurassic and Cretaceous eras, we have an idea of what many of the species looked like, from modern sharks of our present-day oceans. The Cenozoic and Mesozoic gave us many hundreds of species of selachians (sharks, skates, rays, and sawfishes), many of which are with us today.

In closing, I would like to say that it is my sincere hope that the Gerard R. Case Chondrichthyan collection of the Kanagawa Prefectural Museum, Yokohama, Japan, will be of great benefit to the many scientists who study its specimens.

I would like to thank the Kanagawa Prefectural Museum for housing this special collection, as well as for naming it in my honor, but above all, I wish to thank the Japanese people for thier interest in the sciences.

Gerard R. Case

Gerard Ramon Case
September 21, 1993
Jersey City, N.J., USA



Protoplatyrhina renae Case 1987

* Kanagawa Prefectural Museum (1992) Catalogue of the Chondrichthyan specimens in Gerard Ramon Case Collection of the Kanagawa Prefectural Museum, Part 1 Paleozoic Chondrichthyes, 114 pp..

まえがき

原始的な古生代型サメ類は古生代デボン紀後期に初めて出現し、二畳紀後期まで生存していたが、中生代三畳紀になって現代型のサメ類に入れ替った。そしてこの現代型のサメ類は外洋から沿岸、汽水まで、地球上の水域に広く生息し、現在に至っている。

デボン紀後期以来、古生代型のサメ類は基本的に異なる二つのタイプの歯を持つようになった。一つは肉食性の鋭い尖った歯で、もう一つは、貝類や甲殻類のような堅い殻を砕いて食べる扁平で円みのある歯である。同じ時代に、外見上は今日のエイ類のような姿には見えないが、エイ類ばかりでなく、また初期のギンザメ類を代表する種群が中生代の海を泳ぎまわっていた。残念ながら、古生代の軟骨魚類の祖先魚種に関する骨格資料は、二三の例を除いて、化石の記録が残されていない。

原始的な軟骨魚類、すなわち初期の軟骨魚類（*図版５、図7225a, bのイニオプテリクス *Iniopteryx rushlaui* Zangerl & Caseと図版17、図9294a, bのロメロダス *Romerodus orodontus* Zangerl）は、ほとんどが分離した歯の化石（デボン紀からに二畳紀にかけてのもの）で代表されている。それらの歯の形状は、貝を噛み砕く型や肉食型のものである。しかしながら、今世紀になって、数種のサメ型魚類の炭化した骨格に関する多くの重要な発見がなされ、世界中の科学雑誌に発表されるようになった。その結果、初期の軟骨魚類の全体像がどうのようなものであったかの知識が得られるようになっている。

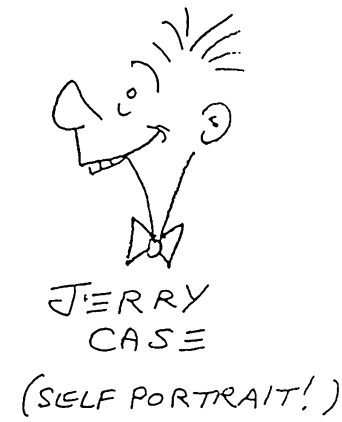
奇怪な姿のサメ型魚類がたくさん知られているが、とくに、カルピンスキーにより発見されたヘリコプリオン（*Helicoprion bessonowi* Karpinsky）のようなエデスタス類の炭化された骨格は、今のところ発見されていない。この原始的なサメ型魚類の歯は発見されているが、その歯列がヘリコプリオンの口にどのように合うのかは、目下のところ、認めることは不可能である。さらに言えば、サメの歯は抜け変わるのが正常だが、なぜヘリコプリオンはそうではなかったのかも不可解なことである。ヘリコプリオンでは、歯は生え変わったが、１本たりとも失われることはなかった！。そのため歯列の成長を示す長い渦巻き型の一列がみられるのである。その歯のほとんどは機能的なものではなかったであろう。

古代サメについては、他にも、リストラカンツス（*Listracanthus*. *図版33, 図9293b）の羽根状の歯や、ペトロードゥス（*Petrodus*. *図版31, 図7125）の頑丈な“ジェリーを作るときの型”のような歯のように、解決されていない謎がある。それらの歯が魚体のどの位置にあったのかについては、相変わらず謎のままである。それが、体の、ある重要な器官を保護するために機能していたであろうことは疑いない。しかし、これらのタイプの軟骨魚類が分類上どこに所属するのか、リストラカンツスとペトロードダゥス（化石ではほとんど常に一緒に発見される）に類縁関係があるのかどうかなど、根本的なところを我々は何も知っていない。

現代型のサメ類（ガンギエイ類、アカエイ類、ノコギリエイ類、ギンザメ類も同様）が出現した中生代ジュラ紀に、すべてが変わった。たとえジュラ紀と白亜紀に発見される化石が少なくても、現生のサメ類から判断して、当時のサメ類がどのような姿をしていたかを窺い知ることができる。新生代と中生代に非常に多数の種の軟骨魚類（サメ類、ガンギエイ類、アカエイ類、ノコギリエイ類）が出現し、それらの多くは現在も生存している。

おわりに、神奈川県立博物館所蔵の G. R. ケース軟体魚類化石コレクションが、多くの研究者に活用されることを切望しています。

この特別なコレクションに私の名前を付けていただき、かつ保存いただくことに対して、神奈川県立博物館に深甚な謝意を表すると同時に、自然科学に興味を持つ日本の皆さんに御礼申し上げます。



ジェラード・ラモン・ケース
1993年9月21日
ジャージー市，ニュージャージー，USA

（訳：中 村 一 恵）

*神奈川県立博物館 (1992) Gerard Ramon Case　軟骨魚類化石標本目録　第1集
古生代軟骨魚類化石．神奈川県立博物館自然部門資料目録 (6) 114 pp..

Gerard Ramon Case軟骨魚類化石標本目録
第２集　中生代・新生代軟骨魚類化石

松島義章・板橋義美・平田大二
（神奈川県立博物館）

Catalogue of the Chondrichthyan Specimens Gerard Ramon Case Collection of the Kanagawa Prefectural Museum Part 2 Mesozoic and Cenozoic Chondrichthyes

Yoshiaki Matsushima, Yoshimi Itabashi and Daiji Hirata

はじめに

本館が所蔵する「ケース・コレクション」は、軟骨魚類化石の研究家として世界的に有名なGerard Ramon Case氏が、30数年以上の永年にわたってアメリカ中心に、ヨーロッパ、アフリカなど広く世界各地へでかけ現地調査をして採集し蓄積した資料で、古生代から新生代にいたる地質時代のサメ類やエイ類など軟骨魚類化石の大量な歯化石が主体となっている。このコレクションを当館が1989年にGerard Ramon Case氏より譲り受けて以来、これらの標本の分類整理に着手し、最初に整理作業の終えた古生代の資料については、1992年「Gerard Ramon Case軟骨魚類化石標本目録　第１集　古生代軟骨魚類化石」として刊行した。

引続き中生代から新生代にかけての各地質時代の膨大な量の標本について、分類、整理、登録を行なってきたが、この作業もほぼ終了したので、ここに「Gerard Ramon Case軟骨魚類化石標本目録　第２集　中生代・新生代軟骨魚類化石」を刊行することとなった。この第２集も第１集と同様に出来るだけ多数の標本を図版にして挿入し、実物資料と比較しながら利用できる目録となるよう編集に心掛けてきた。しかし、まだ完全な目録といえないが、第１集と共に広く調査研究活動に活用され、いくらかでも役に立てて頂ければ幸である。

Gerard Ramon Caseの中生代・新生代軟骨魚類化石コレクションの特徴

この目録に収録できた標本は、中生代・新生代軟骨魚類化石の854件である。標本は歯化石を中心に皮膚の小歯状突起化石や背鰭棘化石、脊椎骨化石などで、かなりの資料が１件数点と複数の標本よりなる。その中でもNo.7313のオドンタスピス属（*Odontaspis* spp.）は1288個、No.7280のカルカリヌス属（*Carcharhinus* sp.）は846個と100個以上のものがかなりあり、１件あたりの標本点数は変化に富む。図版には保存のよい形態のはっきりした標本を用いて、ほぼ原寸大でカラー図版を４頁、白黒図版を40頁の合計44頁を図示した。

標本の産出した地質時代は、表１のように中生代三畳紀から新生代第三紀鮮新世までである。

その内容を詳しくみると、産出時代の確実なものは、中生代では三畳紀が９件（全体の割合で１％）、ジュラ紀が８件（0.9％）、白亜紀が283件（33％）、新生代第三紀では暁新世が23件（2.5％）、始新世が220件（26％）、漸新世が10件（１％）、中新世が258件（30％）、鮮新世が10件（１％）などである。その中で白亜紀が最も多く、続いて第三紀中新世と始新世である。なお、地質時代の最も新しい新生代第四紀の資料は含まれていなかった。

一方、標本の産出地を国別にまとめてみると表２のようになり、アメリカ合衆国が圧倒的に多く518件（全体の割合で61％）をはじめ、カナダの１件、キューバの２件、ヨーロッパではイギリスの68件（８％）、ドイツの30件、フランスの10件、ベルギーの76件（９％）、オランダの３件、オーストリアの３件、マルタの４件、アフリカではモロッコの123件（14％）、チュニジアの４件、南アフリカの８件、さらにニュージーランド１件など14ヶ国に及んでいる（図１）。最も多いアメリカ合衆国を除けば、モロッコ、ベルギー、イギリスの順となっている。アメリカ合衆国について州別でみるとニュージャージー、ノースカロライナ、サウスカロライナ、フロリダ、テキサス、ワイオミング、オレゴン、カリフォルニアなど東部から中部、さらに南部から西部と20州に及んでいる（図３）。その中で最多はノースカロライナの106件（アメリカ合衆国全体の割合で20％）、ニュージャージーの92件（18％）、テキサスの49件（10％）、サウスカロライナの45件（９％）、カリフォルニアの41件（８％）などが数多くの標本を産出した州である。

このような特徴を示す資料をCappetta（1987）の中生代・新生代軟骨魚類化石分類で検討してみると、p.63～86で明らかなように34科63属172種となる。これは第１集の古生代軟骨魚類化石資料と比べて３倍の多さを示す。その中から広く知られている２～３種について注目してみる。日本では、古くより天狗の爪で親しまれているサメの歯化石：カロカロクレス・メガロドン（*Carcharocles megalodon*：最近まではカルカロドン・メガロドン*Carcharodon megalodon*で分類されていた）は、アメリカ合衆国ノースカロライナ、サウスカロライナ、ジョージア、フロリダ、カリフォルニア州の13か所とベルギー２か所の合計13か所の資料からなり、大西洋を挟んでアメリカとヨーロッパのものが収集されている。一方、人食いサメで有名なホホジロサメ（カルカロドン・カルカリアス*Carcharodon carcharias*）は、アメリカ合衆国ノースカロライナ、サウスカロライナ、ジョージア、フロリダ、カリフォルニア州など９か所のものがみられ、これらはいずれもカロカロクレス・メガロドンと同じ中新世のもので、同時期に生息していたことを示す。日本でカロカロクレス・メガロドンと共産するアオザメ属のイスルス・ハスタリス（*Isurus hastalis*）は、アメリカ合衆国ニュジャージー、メリーランド、ノースカロライナ、サウスカロライナ、ジョージア、フロリダ、カリフォルニア州の12か所、ベルギー、オランダ、イングランドの７か所の資料が得られている。このように本種もカロカロクレス・メガロドンと同様に大西洋を挟んでアメリカとヨーロッパのものが広く揃っている。

このようにかなりの種がアメリカとヨーロッパ、さらにはアフリカまで広域にわったて収集されており、今後、日本から産出するいろいろの種と比較研究をおこなう上で、多くの資料が揃っている本コレクションは重要なものといえよう。

表１．Gerard Ramon Case軟骨魚類化石コレクションにみられる中生代・新生代軟骨魚類化石標本の地質時代別リスト

地質時代		標本番号 (KPMG No.)	
第三紀 Tertiary	鮮新世 Pliocene	7282, 10180, 10181, 10182, 10223, 10308, 10421, 10570, 10619, 10644 (10)	7292, 7293,
	中新世 Miocene	7276, 7277, 7278, 7279, 7280, 7281, 7283, 7284, 7285, 7286? 7287, 7288, 7289, 7290, 7291, 7296, 7297, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7331, 7332, 7334, 7339, 7349, 7350, 7351, 7352, 7353, 7354, 7355, 7356, 7357? 7358, 7359, 7360, 7362, 7363, 7364, 10046, 10048, 10049, 10054, 10055, 10056, 10063, 10064, 10083, 10086, 10088, 10102, 10103, 10104, 10133, 10163, 10164?10165, 10166, 10167, 10168, 10169, 10170, 10171, 10172, 10173, 10174, 10175, 10176, 10177, 10178, 10179, 10189, 10193, 10194, 10195, 10231, 10245, 10270, 10272, 10273, 10276, 10277, 10278, 10279, 10280, 10281, 10285, 10287, 10288, 10289, 10295, 10296, 10297, 10298, 10299, 10300, 10301, 10302, 10303, 10304, 10305, 10306, 10307, 10309, 10310, 10311, 10312, 10313, 10315, 10328, 10348, 10401, 10402, 10403, 10404, 10405, 10406, 10407, 10413?10414, 10415, 10416, 10417, 10418, 10419, 10420, 10422, 10423, 10425, 10435, 10518, 10519, 10520, 10522, 10523, 10524, 10526, 10527, 10528, 10529, 10530, 10531, 10532, 10533, 10541, 10542, 10543, 10544, 10545, 10546, 10547, 10555, 10556, 10557, 10558, 10559, 10560, 10561, 10562, 10563, 10564, 10565, 10566, 10567, 10568 10569, 10571, 10572, 10573, 10574, 10575, 10576, 10577, 10579, 10580, 10581, 10582, 10583, 10584, 10586, 10587, 10591, 10592, 10593, 10594, 10595, 10596, 10597, 10598, 10606, 10607, 10608, 10609, 10610, 10611, 10612, 10613, 10614, 10615, 10616, 10617, 10618, 10620, 10621, 10623, 10624, 10625, 10627, 10628, 10630, 10631, 10633, 10634, 10635, 10636, 10640, 10642, 10645, 10646, 10647, 10654, 10660, 10661, 10662, 10663, 10664, 10665, 10666, 10670, 10672, 10680, 10688, 10689, 10691, 10711, 10712, 10713, 10714, 10715, 10716, 10717, 10718, 10720, 10721, 10724, 10737, 10740, 10741, 10753, 10754, 10755, 10756 (258)	7294, 7295, 7319, 10283 (6)
	漸新世 Oligocene	10047, 10160, 10230, 10238, 10239, 10240, 10241, 10243, 10709, 10738 (10)	
	始新世 Eocene	7308, 7309, 7311, 7312, 7313, 7318, 7329, 7330, 7333, 7341, 7344, 7365, 7366, 7369, 7370, 7371, 7372, 10045, 10050, 10052, 10062, 10071, 10072, 10074, 10075, 10076, 10077, 10078, 10079, 10080, 10081, 10082, 10085, 10096, 10097, 10098, 10099, 10100, 10101, 10129, 10130, 10131, 10132, 10134, 10135, 10136, 10137, 10138, 10139, 10140, 10141, 10142, 10143, 10144, 10145, 10146, 10147, 10149, 10150, 10151, 10152, 10153, 10154, 10155, 10156, 10157, 10159, 10183, 10190, 10191, 10192, 10197, 10198, 10199, 10200, 10201, 10202, 10203, 10204, 10205, 10206, 10207, 10208, 10209, 10210, 10211, 10212, 10213, 10214, 10215, 10216, 10217, 10218, 10222, 10224, 10225, 10226, 10227, 10228, 10229, 10232, 10233, 10234, 10235, 10236, 10237, 10242, 10254, 10255, 10274, 10282, 10284, 10290, 10291, 10292, 10314, 10316, 10342, 10343, 10344, 10346, 10347, 10383, 10384, 10385, 10386, 10388, 10389, 10390, 10391, 10394, 10396, 10398, 10408, 10409, 10410, 10411, 10424, 10426, 10427, 10428, 10429, 10430, 10431, 10432, 10433, 10434, 10508, 10509, 10510, 10512, 10513, 10514, 10515, 10516, 10517, 10521, 10534, 10535, 10536, 10537, 10538, 10539, 10540, 10548, 10549, 10551, 10552, 10553, 10578, 10585, 10588, 10589, 10590, 10599, 10600, 10601, 10602, 10603, 10626, 10629, 10648, 10656, 10657, 10658, 10659, 10671, 10673, 10674, 10682, 10683, 10684, 10685, 10686, 10690, 10692, 10693, 10694, 10695, 10696, 10697, 10698, 10699, 10701, 10702, 10703, 10704, 10705, 10706, 10708, 10719, 10722, 10723, 10725, 10726, 10742, 10743, 10750, 10751, 10752 (220)	
	暁新世 Palaeocene	7367, 7368, 7373, 7374, 7375, 7376, 10051, 10095, 10125, 10127, 10128, 10158, 10219, 10220, 10221, 10382, 10395, 10507, 10511, 10668, 10707, 10745, 10747 (23)	[527]
白亜紀 Cretaceous	上部	7299, 7303, 7307, 7310, 7316, 7335, 7336, 7337, 7338, 7340, 7342, 7343, 7345, 7346, 10006, 10019, 10020, 10021, 10022, 10023, 10024, 10025, 10026, 10027, 10028, 10029, 10030, 10031, 10032, 10033, 10034, 10035, 10038, 10039, 10040, 10041, 10042, 10043, 10044, 10053, 10057, 10058, 10059, 10060, 10061, 10065, 10066, 10067, 10068, 10069, 10070, 10073, 10087, 10089, 10091, 10092, 10093, 10094, 10106, 10107, 10108, 10109, 10110, 10111, 10112, 10113, 10114, 10115, 10116, 10118, 10119, 10120, 10121, 10122, 10123, 10184, 10185, 10186, 10187, 10188, 10244, 10246, 10247, 10248, 10249, 10250, 10251, 10252, 10253, 10256, 10257, 10258, 10259, 10260, 10261, 10262, 10263, 10264, 10265, 10267, 10268, 10269, 10286, 10317, 10318, 10319, 10320, 10321, 10322, 10323, 10324, 10325, 10326, 10327, 10329, 10331, 10332, 10333, 10334, 10337, 10338, 10339, 10340, 10341, 10345, 10349, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10357, 10358, 10359, 10360, 10361, 10362, 10363, 10364, 10365, 10366, 10367, 10368, 10370, 10371, 10372, 10373, 10374, 10375, 10376, 10377, 10378, 10379, 10387, 10392, 10393, 10397, 10399, 10436, 10437, 10438, 10439, 10440, 10441, 10442, 10443, 10444, 10445, 10446, 10448, 10449, 10450, 10451, 10452, 10453, 10454, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10462, 10463, 10464, 10465, 10466, 10467, 10468, 10469, 10470, 10471, 10472, 10473, 10474, 10475, 10476, 10477, 10478, 10479, 10480, 10481, 10482, 10483, 10484, 10485, 10486, 10487, 10488, 10489, 10490, 10491, 10492, 10493, 10494, 10495, 10496, 10497, 10499, 10500, 10501, 10502, 10503, 10504, 10505, 10506, 10637, 10638, 10639, 10641, 10649, 10650, 10651, 10652, 10653, 10655, 10667, 10675, 10676, 10677, 10678, 10679, 10681, 10727, 10728, 10729, 10730, 10731, 10732, 10733, 10734, 10735, 10736, 10739, 10744, 10746, 10748, 10749 (261)	7300, 7301, 7314, 7315, 10005, 10036, 10037, 10090, 10124, 10330, 10335, 10336, 10380, 10381, 10447, 10498, 10757 (17)
	下部	10117, 10266, 10369, 10400, 10669 (5)	[283]
ジュラ紀 Jurassic		10003, 10004, 10012, 10013, 10015, 10016, 10017, 10018 (8)	[8]
三畳紀 Triassic	上部	10000, 10001, 10002 (3)	10007, 10008, 10009, 10010, 10011, 10014 (6)
	下部		[9]
時代不詳		7304, 7305, 10622, 10687 (4)	[4]

( ):標本件数, [ ]:小計

Pliocene - Pleistocene	10105
Miocene／Pliocene	10161, 10162, 10275, 10293, 10294, 10412, 10525, 10554, 10604, 10605, 10632, 10643, 10710
Upper Eocene - Lower Oligocene	10148, 10550, 10700
Palaeocene／Eocene	10126
Cretaceous - Miocene ?	7361, 10271
Upper Cretaceous & Tertiary	7306, 10084, 10196

表2．Gerard Ramon Case軟骨魚類化石コレクションにみられる中生代・新生代軟骨魚類化石標本の産出地別リスト

国名（州名）		標本番号（KPMG No.）
アメリカ合衆国 U・S・A	ノース カロライナ州 (North Carolina)	7276, 7277, 7278, 7279, 7280, 7281, 7282, 7283, 7284, 7285, 7286, 7287, 7288, 7289, 7290, 7291, 7292, 7293 7294, 7295, 7335, 7336, 7337, 7338, 7339, 7340, 7341, 10049, 10059, 10092, 10168, 10179, 10189, 10211, 10213, 10216 10222, 10223, 10276, 10280, 10283, 10284, 10290, 10307, 10309, 10310, 10313, 10329, 10337, 10338, 10345, 10387, 10388, 10397 10403, 10420, 10422, 10429, 10435, 10446, 10466, 10499, 10500, 10521, 10528, 10531, 10559, 10568, 10571, 10572, 10573, 10574 10575, 10576, 10577, 10588, 10590, 10597, 10598, 10600, 10609, 10616, 10617, 10618, 10620, 10621, 10622, 10623, 10624, 10625 10634, 10646, 10647, 10662, 10675, 10679, 10689, 10698, 10712, 10718, 10720, 10721, 10728, 10733, 10734, 10737 (106)
	サウス カロライナ州 (South Carolina)	7296, 7361, 10083, 10155, 10166, 10167, 10175, 10190, 10270, 10271, 10281, 10292, 10296, 10297, 10303, 10396, 10401, 10410 10416, 10417, 10418, 10519, 10527, 10532, 10541, 10546, 10553, 10557, 10558, 10564, 10578, 10586, 10587, 10592, 10593, 10603 10608, 10614, 10626, 10636, 10666, 10753, 10754, 10755, 10756 (45)
	ニュージャージー州 (New Jersey)	7299, 7300, 7301, 7320, 7321, 7322, 7323, 7324, 7325, 7326, 7327, 7328, 7329, 7330, 7342, 7343, 7344, 7345 7346, 7360, 10006, 10048, 10057, 10067, 10087, 10106, 10111, 10133, 10134, 10139, 10157, 10171, 10187, 10191, 10192, 10232 10247, 10256, 10258, 10265, 10267, 10269, 10300, 10314, 10317, 10319, 10320, 10325, 10327, 10349, 10360, 10375, 10390, 10398 10408, 10414, 10424, 10426, 10427, 10431, 10434, 10438, 10444, 10455, 10456, 10457, 10458, 10459, 10460, 10461, 10467, 10468 10476, 10477, 10504, 10506, 10529, 10548, 10562, 10613, 10651, 10653, 10663, 10676, 10677, 10681, 10694, 10713, 10723, 10727 10740, 10745 (92)
	カリフォルニア州 (California)	7352, 7354, 7356, 10054, 10055, 10056, 10064, 10088, 10169, 10170, 10172, 10176, 10180, 10272, 10277, 10289, 10298, 10299 10301, 10304, 10407, 10415, 10421, 10524, 10530, 10542, 10545, 10560, 10561, 10563, 10565, 10570, 10596, 10610, 10611, 10612 10615, 10640, 10691, 10714, 10715 (41)
	デラウェア州(Delaware)	7297, 10186, 10245, 10246, 10248, 10249, 10251, 10268, 10315, 10324, 10328, 10368, 10392, 10487, 10503, 10652, 10654, 10655 10678, 10680, 10746 (21)
	テキサス州(Texas)	10019, 10023, 10024, 10027, 10030, 10032, 10033, 10038, 10039, 10042, 10093, 10113, 10114, 10116, 10117, 10118, 10122, 10217 10218, 10250, 10259, 10261, 10264, 10322, 10323, 10334, 10340, 10357, 10361, 10363, 10366, 10369, 10374, 10400, 10436, 10451 10462, 10463, 10478, 10479, 10481, 10484, 10485, 10486, 10488, 10493, 10505, 10649, 10650 (49)
	バージニア州(Virginia)	10126, 10138, 10199, 10200. 10224, 10432, 10522, 10547, 10591, 10594, 10699, 10725, 10752 (13)
	ワイオミング州(Wyoming)	10029, 10036, 10037, 10041, 10044, 10069, 10091, 10119, 10121, 10124, 10260, 10326, 10362, 10371, 10373, 10380, 10381, 10480 10489, 10492, 10498, 10641, 10669, 10757 (24)
	ジョージア州(Georgia)	10102, 10140, 10144, 10148, 10153, 10161, 10162, 10195, 10273, 10275, 10288, 10293, 10294, 10312, 10406, 10412, 10419, 10523 10525, 10544, 10549, 10550, 10551, 10554, 10584, 10595, 10599, 10602, 10604, 10605, 10631, 10632, 10688, 10700, 10704, 10710 10742 (37)
	フロリダ州(Florida)	10163, 10177, 10193, 10194, 10278, 10305, 10311, 10405, 10411, 10425, 10518, 10526, 10533, 10555, 10566, 10579, 10580, 10581 10582, 19583, 10627, 10628, 10630, 10633, 10635, 10642, 10645, 10660, 10664, 10665, 10711, 10716, 10724, 10741 (34)
	メリーランド州(Maryland)	10058, 10073, 10142, 10165, 10215, 10295, 10347, 10386, 10430, 10556, 10606, 10607, 10686, 10696 (14)
	ノース ダコタ州(N. Dakota)	10095 (1)
	サウス ダコタ州(S. Dakota)	10035, 10115, 10123, 10263, 10365, 10379, 10497 (7)
	モンタナ州(Montana)	10511 (1)
	カンザス州(Kansas)	10005, 10043, 10252, 10266, 10399, 10450, 10454, 10464, 10490 (9)
	ミシシッピー州 (Mississippi)	10077, 10141, 10262, 10364, 10482, 10516, 10534, 10539, 10695, 10751 (10)
	アラバマ州(Alabama)	10082, 10158, 10707 (3)
	コロラド州(Colorado)	10028, 10031, 10257, 10471, 10483 (5)
	オレゴン州(Oregon)	10143, 10569 (2)
	アーカンソー 州(Arkansas)	10145, 10147, 10585, 10697 (4)
カナダ Canada		10639 (1)
キューバ Cuba		10164, 10413 (2)
ニュージーランド New Zealand		10197 (1)
イギリス United Kingdom		7314, 7315, 7357, 7358, 7359, 10002, 10004, 10012, 10013, 10014, 10016, 10017, 10018, 10020, 10021, 10034, 10040, 10078 10079, 10080, 10081, 10090, 10098, 10099, 10112, 10149, 10154, 10156, 10183, 10202, 10203, 10204, 10205, 10206, 10207, 10219 10220, 10221, 10229, 10242, 10274, 10286, 10291, 10321, 10332, 10333, 10335, 10336, 10367, 10370, 10428, 10452, 10465, 10510 10552, 10644, 10648, 10667, 10671, 10673, 10674, 10685, 10687, 10701, 10705, 10706, 10726, 10739 (68)
ドイツ Germany		7355, 7364, 10000, 10001, 10003, 10007, 10008, 10009, 10011, 10015, 10022, 10025, 10047, 10089, 10103, 10120, 10188, 10238 10239, 10240, 10241, 10243, 10372, 10393, 10445, 10453, 10491, 10501, 10709, 10738 (30)
フランス France		7363, 10010, 10026, 10061, 10201, 10253, 10341, 10502, 10543, 10672 (10)
ベルギー Belgium		7331, 7332, 7333, 7334, 7351, 7362, 10050, 10052, 10053, 10060, 10063, 10065, 10066, 10068, 10074, 10085, 10086, 10094 10109, 10110, 10125, 10150, 10151, 10152, 10160, 10174, 10181, 10182, 10184, 10185, 10208, 10209, 10214, 10225, 10226, 10227 10228, 10230, 10231, 10234, 10235, 10236, 10237, 10244, 10282, 10287, 10308, 10318, 10348, 10389, 10402, 10423, 10440, 10441 10442, 10443, 10474, 10475, 10513, 10517, 10540, 10589, 10601, 10619, 10629, 10637, 10638, 10643, 10661, 10670, 10682, 10690 10702, 10703, 10743, 10744 (76)
オランダ Netherlands		10173, 10212, 10302 (3)
オーストリア Austria		10104, 10146, 10409 (3)
マルタ Malta		7353, 10285, 10404, 10520 (4)
アフリカ Africa		7350, 10129 (2)
南アフリカ S. Africa		7349, 10046, 10105, 10178, 10279, 10306, 10567, 10717 (8)
チュニジア Tunisia		10130, 10383, 10535, 10692 (4)
モロッコ Morocco		7303, 7304, 7305, 7306, 7307, 7308, 7309, 7310, 7311, 7312, 7313, 7316, 7318, 7319, 7365, 7366, 7367, 7368 7369, 7370, 7371, 7372, 7373, 7374, 7375, 7376, 10045, 10051, 10062, 10070, 10071, 10072, 10075, 10076, 10084, 10096 10097, 10100, 10101, 10107, 10108, 10127, 10128, 10131, 10132, 10135, 10136, 10137, 10159, 10196, 10198, 10233, 10254, 10255 10316, 10330, 10331, 10339, 10342, 10343, 10344, 10346, 10350, 10351, 10352, 10353, 10354, 10355, 10356, 10358, 10359, 10376 10377, 10378, 10382, 10384, 10385, 10391, 10394, 10395, 10433, 10437, 10439, 10447, 10448, 10449, 10469, 10470, 10472, 10473 10494, 10495, 10496, 10507, 10508, 10509, 10512, 10514, 10515, 10536, 10537, 10538, 10656, 10657, 10658, 10659, 10668, 10683 10684, 10693, 10708, 10719, 10722, 10729, 10730, 10731, 10732, 10735, 10736, 10747, 10748, 10749, 10750 (123)
産地不明		10210 (1)

( ):標本件数

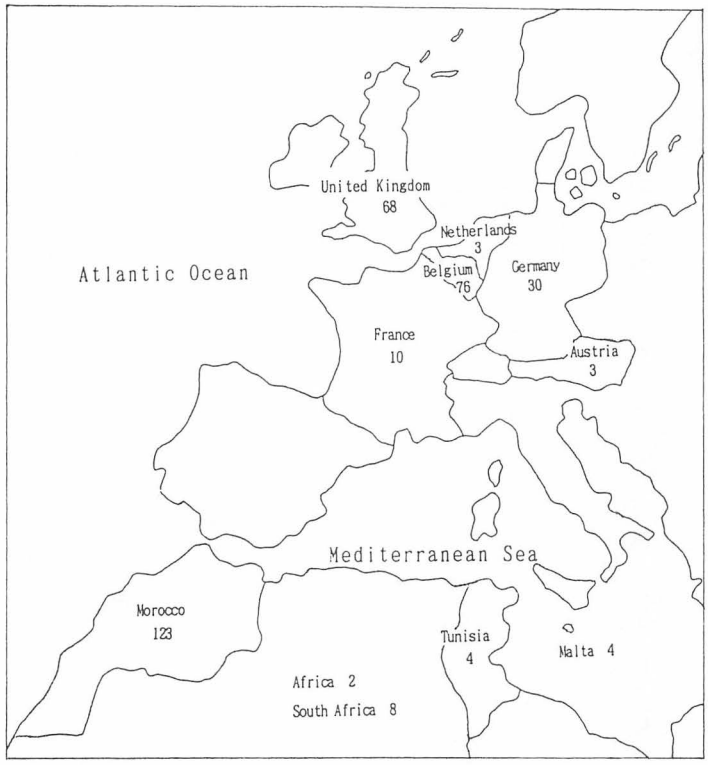


図１．Gerard Ramon Case軟骨魚類化石コレクションにおける中生代・新生代軟骨魚類化石標本のヨーロッパ・アフリカの産出地（数字は国別標本件数）

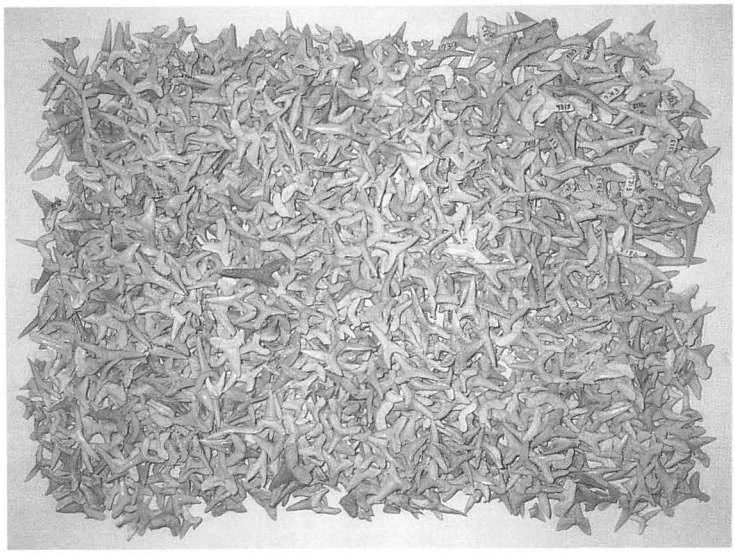


図２．最も多い1,288個からなるNo.7313 オドンタスピス属の歯化石標本

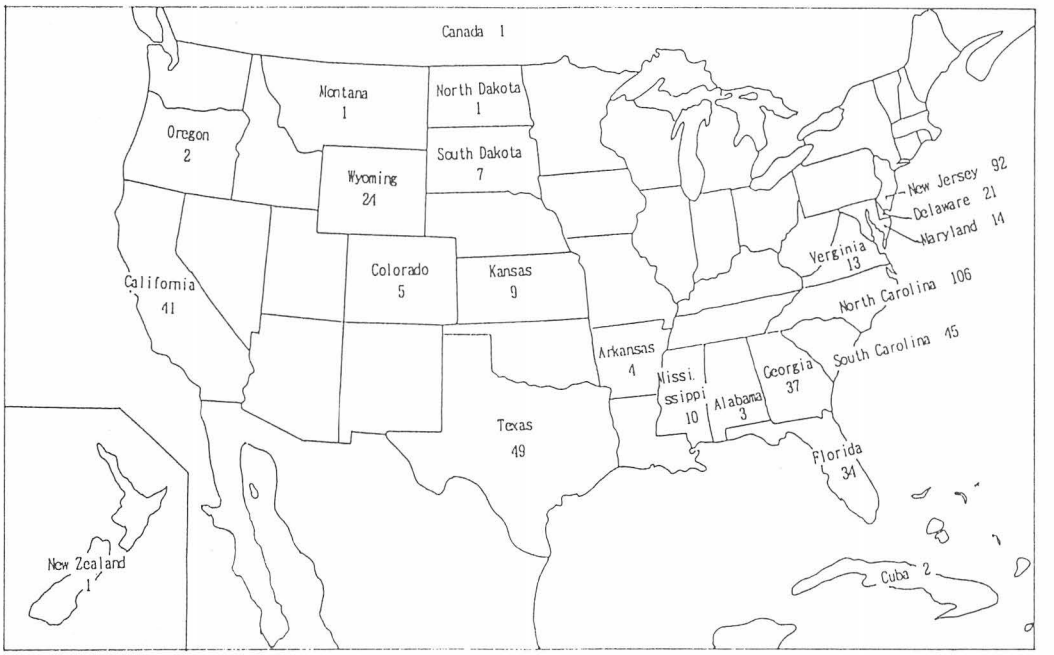


図３．Gerard Ramon Case軟骨魚類化石コレクションにおける中生代・新生代軟骨魚類化石標本のアメリカ合衆国内及び周辺の産出地（数字は国，州別標本件数）

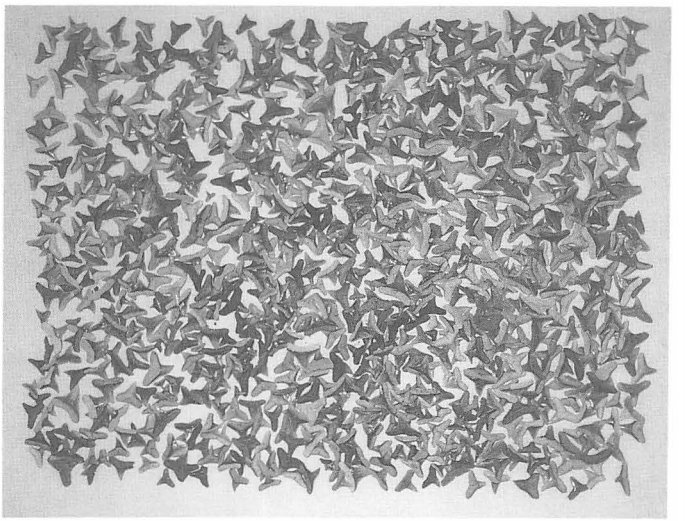


図４．２番目に多い846個のNo.7280 メジロザメ属の歯化石標本

本目録について

1．本目録はGerard Ramon Case氏がアメリカ合衆国国内を中心にヨーロッパやアフリカなどの現地にでかけ、調査収集した中生代・新生代軟骨魚類化石を収録したものである。
2．目録の項目は標本登録番号、学名、産出層、産出地点、地質時代、図示された図版の番号の6項目で、この順番に配列してある。
3．図示された図版番号は、本目録、Case（1973)、Case（1982）の順に配列してある。
4．産出した地質時代については、表1にまとめた。
5．産出地点のうちヨーロッパとアフリカについては国名と標本件数を図1に、アメリカ合衆国については州名と標本件数を図2に示した。

謝　辞

この目録を刊行するにあたり、コレクションを快くお譲りくださり、しかも遠方のアメリカニュージャージーよりわざわざご来館いただき、標本の整理とメッセージをいただいたGerard Ramon Case氏に心から感謝申し上げる。またご多用の中をしばしばご来館いただきコレクションの収集にご尽力くださり、目録の作成にあたりご指導をいただいた横浜国立大学教育学部教授長谷川善和氏、さらに、目録の作成原稿のご校閲と玉稿を賜った国立科学博物館地学研究部室長上野輝弥氏ならびに鶴見大学歯学部助教授後藤仁敏氏に対し、ここに感謝の意を表す。なお、Gerard Ramon Case氏のメッセージの和訳をお願いした当館中村一恵専門学芸員、多数の標本の写真撮影をお願いした当館井上久美子主査、標本の整理にあたりご協力をいただいた星野憲三氏、中馬洪治氏、小六潔子氏、小貫由美氏の方々に対し厚くお礼申し上げる。

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中生代・新生代軟骨魚類化石標本目録

Catalogue of Mesozoic and Cenozoic Chondrichthyes

No. 7276
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: North Carolina, USA
Age: Miocene
Illustrate: Plate 2(2,4,5,6),22(7276a~r),35(7276a~h)

No. 7277
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Bearfort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 28(7277a~r),40(7277a~d)

No. 7278
Name: *Galeocerdo cuvieri* (Peron & Leseur)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 25(7278a~t)

No. 7279
Name: *Myliobatis* sp. (Sting Ray Barbs)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 29(7279a~n)

No. 7280
Name: *Carcharhinus* sp.
Formation: unknown
Locality: North Carolina, USA
Age: Miocene
Illustrate: Plate 40(7280a~d)

No. 7281
Name: *Pterolamiops longimanus* (Poey)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 25(7281a~j)

No. 7282
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Pliocene
Illustrate: Plate 23(7282a~k)

No. 7283
Name: *Notorhynchus* sp.
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 7(7283a~k)

No. 7284
Name: *Notorhynchus* cf. *N.primigenius* (Agassiz)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate: Plate 1(10,11),7(7284a~k)

No. 7285
Name: *Aetobatus* sp.
Formation: unknown
Locality: North Carolina, USA
Age: Miocene
Illustrate: Plate 42(7285a,b)

No. 7286
Name: *Parotodus benedeni* (Le Hon)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene ?
Illustrate: Plate 28(7286a~c)

No. 7287
Name: *Alopias* cf. *A.superciliosus* (Lowe)
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate:

No. 7288
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Lee Creek Mine,S side of Pamlico River near Aurora,Beaufort Co., North Carolina, USA
Age: Miocene
Illustrate:

No. 7289
Name: *Odontaspis* sp.
Formation: unknown
Locality: North Carolina, USA
Age: Miocene
Illustrate: Plate 10(7289a~t)

No. 7290
Name: *Myliobatis* sp. (Sting Ray Barbs)
Formation: Pungo River Marl
Locality: Lee Creek (T.G.S.), Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 43(7290a,b)

No. 7291
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: North Carolina, USA
Age: Miocene
Illustrate: Plate 2(7,8),17(7291a~e)

No. 7292
Name: *Odontaspis cuspidata* Agassiz
Formation: unknown
Locality: Lee Creek Mine, S side of Pamlico river, near Aurora,Beaufort Co., North Carolina, USA
Age: Tertiary
Illustrate: Plate 1(1,2,3),8(7292a~q),26(7292a~t)

No. 7293
Name: *Plinthicus stenodon* Cope
Formation: unknown
Locality: Lee Creek Mine, S side of Pamlico river, near Aurora,Beaufort Co., North Carolina, USA
Age: Tertiary
Illustrate: Plate.44(7293a~e)

No. 7294
Name: *Plinthicus stenodon* Cope
Formation: unknown
Locality: Lee Creek Mine, S side of Pamlico river, near Aurora,Beaufort Co., North Carolina, USA
Age: Tertiary
Illustrate: Plate 44(7294a~f)

No. 7295
Name: *Odontaspis* sp.
Formation: unknown
Locality: Lee Creek Mine, S side of Pamlico river, near Aurora,Beaufort Co.,N.Carolina, USA
Age: Tertiary
Illustrate: Plate 10(7295a~t)

No. 7296
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 2(3),18(7296a~d)

No. 7297
Name: *Squalicorax kaupi* (Agassiz)
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate: Plate 39(7297a,b)

No. 7299
Name: *Ischyodus bifurcatus* Case
Formation: Navesink Fm.
Locality: Holmdel, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 7300
Name: *Edaphodon* sp.
Formation: Navesink Fm.
Locality: Emil Novak Farm, Lumberton, New Jersey, USA
Age: Cretaceous
Illustrate: Case 1973: p.29,fig.104

No. 7301
Name: *Ischyodus bifurcatus* Case
Formation: Navesink Fm.
Locality: Big Brook Marlboro, New Jersey, USA
Age: Cretaceous
Illustrate:

No. 7303
Name: *Cretolamna biauriculata maroccana* (Arambourg)
Formation: unknown
Locality: Beni Idir, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 38(7303a,b)

No. 7304
Name: *Myliobatis* sp. <Stinger tail barbs>
Formation: unknown
Locality: Morocco
Age: unknown
Illustrate: Plate 4(13,14),43(7304a,b)

No. 7305
Name: *Odontaspis* spp.
Formation: unknown
Locality: Morocco
Age: unknown
Illustrate:

No. 7306
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous and Tertiary
Illustrate:

No. 7307
Name: *Cretolamna appendiculata* (Agassiz)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 37(7307a,b)

No. 7308
Name: *Aetobatus* sp.
Formation: unknown
Locality: Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 42(7308a~c)

No. 7309
Name: *Isurus* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 37

No. 7310
Name: *Sclerorhynchus* sp.
Formation: unknown
Locality: R.R.Cutt Near Beni Idir, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 42(7310a,b)

No. 7311
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Thanetian)
Illustrate:

No. 7312
Name: *Myliobatis* sp.
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 43(7312a,b)

No. 7313
Name: *Odontaspis* spp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 7314
Name: *Asteracanthus ornatissimus* Agassiz
Formation: Phos Bed.
Locality: Potton, Bedfordshire, England, UK
Age: Cretaceous (Neocomian)
Illustrate: Plate 5

No. 7315
Name: *Ptychodus decurrens* Agassiz
Formation: Chalk
Locality: Kent, England, UK
Age: Cretaceous
Illustrate: Plate 5

No. 7316
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: R.R.Cutt, Beni Idir, Morocco
Age: Upper Cretaceous (Maastaichtian)
Illustrate: Plate 44(7316a~d)

No. 7318
Name: *Anoxypristis mucrodens* White
Formation: unknown
Locality: Oued Zen, Morocco
Age: Early Eocene (Ypresian)
Illustrate: Plate 42

No. 7319
Name: *Otodus obliqnus* Agassiz
Formation: unknown
Locality: Morocco
Age: Tertiary
Illustrate: Plate 3(1~9),20(7319a~h),21(7319a~p)

No. 7320
Name: *Carcharocles* sp.
Formation: Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene (Burdigalian)
Illustrate: Plate 39

No. 7321
Name: *Isurus hastalis* (Agassiz)
Formation: Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene
Illustrate: Plate 35(7321a~e)

No. 7322
Name: *Odontaspis* sp.
Formation: Kirkwood Fm.
Locality: New Jersey, USA
Age: Miocene
Illustrate: Plate 10(7322a~r)

No. 7323
Name: *Carcharhinus* sp.
Formation: Kirkwood Fm.
Locality: New Jersey. USA
Age: Miocene
Illustrate: Plate 40(7323a~e)

No. 7324
Name: *Odontaspis* sp.
Formation: Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene (Burdigalian)
Illustrate: Plate 1(8,9),11(7324a~q)

No. 7325
Name: *Galeocerdo aduncas* Agassiz
Formation: unknown
Locality: New Jersey, USA
Age: Miocene
Illustrate: Plate 41(7325a~c)

No. 7326
Name: *Galeocerdo contortus* (Gibbes)
Formation: unknown
Locality: New Jersey, USA
Age: Miocene
Illustrate: Plate 27(7326a~x)

No. 7327
Name: *Hemipristis serra* Agassiz
Formation: Shark River Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene
Illustrate: Plate 40(7327a,b)

No. 7328
Name: *Myliobatis* sp.
Formation: Kirkwood Fm.
Locality: Shark River, Neptune,New Jersey, USA
Age: Early Miocene
Illustrate: Plate 43(7328a~c)

No. 7329
Name: *Odontaspis* sp.
Formation: unknown
Locality: New Jersey, USA
Age: Eocene
Illustrate: Plate 11(7329a~f)

No. 7330
Name: *Odontaspis* sp.
Formation: unknown
Locality: New Jersey, USA
Age: Eocene
Illustrate: Plate 11(7330a~g)

No. 7331
Name: *Isurus* sp.
Formation: unknown
Locality: Rumst, Belgium
Age: Miocene
Illustrate:

No. 7332
Name: *Carcharocles megalodon* (Agassiz)
Formation: Claypit of Brickworks "Rupel-Nete", Antwerpiaan Anb, Edegem Sands.
Locality: Rumst, prov., Antwerpen, Belgium
Age: Miocene
Illustrate: Plate 39

No. 7333
Name: *Carcharocles auriculatus* (Blainville)
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate: Plate 39

No. 7334
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Brickworks at Rumst, Belgium
Age: Miocene
Illustrate:

No. 7335
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 24(7335a~o)

No. 7336
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 37(7336a,b)

No. 7337
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 40(7337a,b)

No. 7338
Name: *Rhombodus binkhorsti* Dames
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 7339
Name: *Pterolamiops longimanus* (Poey)
Formation: Duplin Marl
Locality: Rosehill, North Carolina, USA
Age: Miocene (Tortonian)
Illustrate:

No. 7340
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Castle Hayne Fm. ……?
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 37(7340a,b)

No. 7341
Name: *Striatolamia macrota* (Agassiz)
Formation: Castle Hayne Fm.
Locality: Rosehill, North Carolina, USA
Age: Eocene (Ypresian ?)
Illustrate: Plate 24(7341a~j)

No. 7342
Name: Fragments of Teeth Species indeterminable
Formation: unknown
Locality: Bluffs beside white gate Inn Rt.34, Matawan, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 7343
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: Rt.35 Foodcircus, Middletown, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 32(7343a,b)

No. 7344
Name: *Otodus obliquus* Agassiz
Formation: Vincentown - Hornerstown
Locality: Van Horn Farm, New Egypt, New Jersey, USA
Age: Eocene
Illustrate:

No. 7345
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Navesink Fm.
Locality: Poricy Brook, Middletown, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 40

No. 7346
Name: *Ischyodus* sp.
Formation: Navesink Fm.
Locality: Nutt-Dye Farm, Hornerstown, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 7349
Name: *Carcharodon sulcidens* (Linnaeus)
Formation: unknown
Locality: Uloa-Zululand. South Africa
Age: Miocene
Illustrate: Plate 34(7349a~c)

No. 7350
Name: *Carcharodon sulcidens* (Linnaeus)
Formation: unknown
Locality: Milnerton Beach, Rep. So., Africa
Age: Miocene
Illustrate: Plate 34

No. 7351
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Terhagen, near Boom, Belgium
Age: Miocene (Anversian)
Illustrate: Plate 35

No. 7352
Name: *Isurus planus* (Agassiz)
Formation: Modello
Locality: "Leisure World" housing project, El Toro, California, USA
Age: Miocene
Illustrate: Plate 36(7352a~d)

No. 7353
Name: *Odontaspis* sp.
Formation: C2 Phosphate Bed Mid Globigerina Limestone.
Locality: Gnejna valley, Island of Malta
Age: Miocene
Illustrate: Plate 11

No. 7354
Name: *Isurus planus* (Agassiz)
Formation: Valmonte Member, Monterey Fm.
Locality: Great Lakes Carbon Corp. Diatomaceous Earth, Palos Verdes, California, USA
Age: Miocene
Illustrate: Plate 36(7354a~d)

No. 7355
Name: *Synodontaspis acutissima* (Agassiz)
Formation: unknown
Locality: Flonheim, Germany
Age: Miocene
Illustrate: Plate 32

No. 7356
Name: *Pristiophorus* sp.
Formation: Santa Maria-Garlita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 7(7356a~d)

No. 7357
Name: *Raja clavata* Agassiz ?
Formation: Red Crag Nodule Bed.
Locality: Woodbridge, Suffolk, England, UK
Age: Miocene ?
Illustrate: Plate 42(7357a,b)

No. 7358
Name: *Raja antiqua* Agassiz
Formation: Red Crag Nodule Bed.
Locality: Woodbridge, Suffoik, England, UK
Age: Miocene ?
Illustrate: Plate 42(7358a,b)

No. 7359
Name: *Edaphodon* sp.
Formation: Red Crag Nodule Bed.
Locality: Woodbridge, Suffolk, England, UK
Age: Miocene
Illustrate:

No. 7360
Name: *Notorhynchus primigenius* (Agassiz)
Formation: Kirkwood Fm. ?
Locality: Mingamahone Brook(Hl-43), Allaire state Park, Hurley Pond Rd., Farmingdale, New Jersey, USA
Age: Miocene
Illustrate: Plate 6

No. 7361
Name: *Odontaspis* sp.
Formation: unknown
Locality: Intracoastal waterway near Myrtle Beach, South Carolina, USA
Age: Cretaceous - Miocene ?
Illustrate: Plate 11(7361a,b)

No. 7362
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Near Anutwarpen, Rumst, Belgium
Age: Miocene (Anutversian)
Illustrate: Plate 35(7362a,b)

No. 7363
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: unknown
Locality: Lespiguan, Herault, France
Age: Miocene (Burdigalian)
Illustrate: Plate 32(7363a,b)

No. 7364
Name: *Synodontaspis* sp.
Formation: unknown
Locality: Bippen, Westfalen, Germany
Age: Miocene
Illustrate: Plate 32(7364a,b)

No. 7365
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 43

No. 7366
Name: *Myliobatis dixoni* Agassiz
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene
Illustrate: Plate 4(1),29

No. 7367
Name: *Raja mucronata* (Woodward)
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Montian)
Illustrate:

No. 7368
Name: *Myliobatis raouxi* Arambourg
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Thanatian)
Illustrate: Plate 43(7368a,b)

No. 7369
Name: *Burnhamia daviesi* (Woodward)
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 7370
Name: *Myliobatis* sp.
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 43(7370a,b)

No. 7371
Name: *Myliobatis jugosus* Leidy
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 43(7371a,b)

No. 7372
Name: *Hexanchus microdon* (Agassiz)
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 6(7372a,b)

No. 7373
Name: *Ginglymostoma africanum* Leriche
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Thanetian)
Illustrate:

No. 7374
Name: *Nebrius maghrebianum* (Casier)
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Thanetian)
Illustrate:

No. 7375
Name: *Ginglymostoma subafricanum* Arambourg
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Montian)
Illustrate:

No. 7376
Name: *Dasyatis tetraedra* Arambourg
Formation: unknown
Locality: Oued Zem, Morocco
Age: Palaeocene (Montian)
Illustrate:

No. 10000
Name: *Acrodus lateralis* Agassiz
Formation: Keuper Beds / Muschelkalk
Locality: Sommerhausen, Germany
Age: Upper Triassic
Illustrate:

No. 10001
Name: *Hybodus longiconus* Agassiz
Formation: Muschel Kalk Beds
Locality: Sommerhausen, Germany
Age: Upper Triassic (Keuper)
Illustrate: Plate 5

No. 10002
Name: *Hybodus* sp.
(Spine Fragment in matrix with red peel.)
Formation: unknown
Locality: Penarth, Cardiff, Glamorgan, South Wales, UK
Age: Upper Triassic
Illustrate:

No. 10003
Name: *Hybodus rugosus* (Agassiz)
Formation: Lettenkohle Bonebed
Locality: Crailsheim, Germany
Age: Jurassic
Illustrate: Plate 5

No. 10004
Name: *Hybodus grossiconus* Agassiz
Formation: unknown
Locality: Stonesfield, England, UK
Age: Jurassic
Illustrate: Plate 5(10004a,b)

No. 10005
Name: *Hybodus delabechei* Charlesworth
Formation: Greenhorn L / S Fm.
Locality: 1 mi. S.E. of Getmore, Kansas, USA
Age: Cretaceous
Illustrate: Plate 5

No. 10006
Name: *Hybodus* sp. Cephalic hook
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 5

No. 10007
Name: *Acrodus lateralis* Agassiz
Formation: Muschel Kalk Fm.
Locality: Crailsheim, Wurttemburg, Germany
Age: Triassic
Illustrate:

No. 10008
Name: *Acrodus gaillardoti* Agassiz
Formation: Muschel Kalk Fm.
Locality: Beyreuth, Bavaria, Germany
Age: Triassic
Illustrate: Plate 5

No. 10009
Name: *Acrodus* sp. & Reptile tooth sp. indet.
Formation: Muschel Kalk Fm.
Locality: Heldenmuhle, Germany
Age: Triassic (Keuper)
Illustrate:

No. 10010
Name: *Acrodus acutus* (Agassiz)
Formation: unknown
Locality: Du Ravin de Boisset, Yves de Salins les Basin, France
Age: Triassic
Illustrate:

No. 10011
Name: *Acrodus braunii* Agassiz
Formation: unknown
Locality: Rottenburg, Bavaria, Germany
Age: Triassic (Keuper)
Illustrate:

No. 10012
Name: *Acrodus nobilis* Agassiz
Formation: unknown
Locality: Near Bristol, Somersetshire, England, UK
Age: Jurassic
Illustrate: Plate 5, Case(1973): p.18 ,fig. 57

No. 10013
Name: *Acrodus nobilis* Agassiz
Formation: unknown
Locality: Bristol, Somerset, England, UK
Age: Jurassic (Middle Lias)
Illustrate:

No. 10014
Name: *Acrodus* sp.
Formation: unknown
Locality: Westbury on Severn, Gloucester, England, UK
Age: Triassic
Illustrate:

No. 10015
Name: *Asteracanthus (Strophodus) reticulatus* (Münster)
Formation: unknown
Locality: Zernglaff, Pomorany, Germany
Age: Jurassic
Illustrate: Plate 5

No. 10016
Name: *Asteracanthus magnus*
Formation: unknown
Locality: Shipton-on-Chewell, Oxfordshire, England, UK
Age: Jurassic
Illustrate: Plate 5(10016a,b)

No. 10017
Name: *Asteracanthus (Strophodus) tenuis* Agassiz
Formation: Oolitic L/S
Locality: Stonesfield, Oxfordshire, England, UK
Age: Jurassic
Illustrate: Plate 5

No. 10018
Name: *Asteracanthus ornatissimus* Agassiz var. *A.flettonensis* Woodward
Formation: Oxford Clay
Locality: Fletton, Peterborough, England, UK
Age: Jurassic
Illustrate: Plate 5, Case(1973): p.18,fig.60

No. 10019
Name: *Ptychodus mammillaris* Agassiz
Formation: Eagle Ford Shale
Locality: Dallas, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 5, Case (1973) p.25,fig.86

No. 10020
Name: *Ptychodus mammillaris* Agassiz
Formation: unknown ?
Locality: Rochester, England, UK
Age: Upper Cretaceous (Turonian)
Illustrate: Plate 5(10020a,b)

No. 10021
Name: *Ptychodus mammillaris* Agassiz
Formation: Middle. Chalk
Locality: Burwell, Cambs, England, UK
Age: Upper Cretaceous
Illustrate: Plate 5(10021a,b)

No. 10022
Name: *Ptychodus mammilaris* Agassiz
Formation: unknown
Locality: Dresden, Germany
Age: Upper Cretaceous (Turonian)
Illustrate: Plate 5

No. 10023
Name: *Ptychodus* sp.
Formation: Eagle Ford
Locality: Carrolton, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 5

No. 10024
Name: *Ptychodus* sp.
Formation: Austin Chark
Locality: Dallas, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 5

No. 10025
Name: *Ptychodus* sp.
Formation: unknown
Locality: Labiatus Mergel, Muhlheim, Germany
Age: Upper Cretaceous (Turonian)
Illustrate: Plate 5

No. 10026
Name: *Ptychodus mammillaris* Agassiz
Formation: unknown
Locality: Bettrechies, France
Age: Cretaceous (Turonian)
Illustrate: Plate 5(10026a,b)

No. 10027
Name: *Ptychodus mammillaris* Agassiz
Formation: unknown
Locality: Below Dam, Waco, Texas, USA
Age: Upper Cretaceous (Coniacian)
Illustrate: Plate 5

No. 10028
Name: *Ptychodus* sp.
Formation: Niobrara Fm. Tempas Member Limestone
Locality: Morrison, Colorado, USA
Age: Upper Cretaceous
Illustrate:

No. 10029
Name: *Ptychodus* sp.
Formation: Green Horn Limestone Fm.
Locality: Eastern Wyoming, West of Newcastle, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10029a,b)

No. 10030
Name: *Ptychodus* sp.
Formation: Eagle Foul Shale
Locality: At Arcadia park & Cockerell Hill Rd. Dallas County, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10030a,b)

No. 10031
Name: *Ptychodus* sp.
Formation: Dakota Fm. ?
Locality: Rooney's Gulch, Colorado, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10031a~c)

No. 10032
Name: *Ptychodus* sp.
Formation: Eagle Ford Shale
Locality: Austin, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10032a~c)

No. 10033
Name: *Ptychodus* sp.
Formation: Austin Chalk or Eagle Ford Shale
Locality: On Edge of Lake Texhoma, S.W. of Pottsboro, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10033a~d)

No. 10034
Name: *Ptychodus* sp.
Formation: Chalk Beds
Locality: Dunton Green, Kent, England, UK
Age: Upper Cretaceous
Illustrate: Plate 6(10034a~d)

No. 10035
Name: *Ptychodus* sp.
Formation: Carlisle shale
Locality: Edgemont, South Dakota, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10035a~c)

No. 10036
Name: *Ptychodus* sp.
Formation: Carlile Shale
Locality: Upton, Wyoming, Weston County, USA
Age: Cretaceous
Illustrate: Plate 6(10036a~h)

No. 10037
Name: *Ptychodus* sp.
Formation: Carlisle Shale
Locality: Upton, Wyoming, USA
Age: Cretaceous
Illustrate: Plate 6

No. 10038
Name: *Ptychodus whipplei* Marcou
Formation: unknown
Locality: Chalk Hill Road, Dallas, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 5(10038a,b)

No. 10039
Name: *Ptychodus* sp.
Formation: unknown
Locality: Mt.Lake road Kamp Ranch, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10039a~c)

No. 10040
Name: *Ptychodus* sp.
Formation: Chalk
Locality: Kent, England, UK
Age: Upper Cretaceous
Illustrate: Plate 6(10040a~c)

No. 10041
Name: *Ptychodus* sp.
Formation: Carlisle Shale
Locality: Rawlins, Wyoming, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10041a~c)

No. 10042
Name: *Ptychodus* sp.
Formation: South Basque Fm. (Eagle Ford Shale)
Locality: McGregor, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 6

No. 10043
Name: *Ptychodus* sp.
Formation: Graneros Shale ?
Locality: Fairport, Kansas, USA
Age: Upper Cretaceous
Illustrate: Plate 6(10043a~c)

No. 10044
Name: *Ptychodus mammilaris* Agassiz
Formation: Carlile Shale
Locality: 4 mi. So. Osage, Weston Co., Wyoming, USA
Age: Upper Cretaceous
Illustrate: Plate 5(10044a~l)

No. 10045
Name: *Hexanchus microdon* (Agassiz)
Formation: unknown
Locality: L'Oued Zem, S.E. of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate: Plate 6

No. 10046
Name: *Hexanchus* sp.
Formation: unknown
Locality: Melkbos, Cape Province South Africa
Age: Miocene
Illustrate: Plate 6

No. 10047
Name: *Notorhynchus primigenius* (Agassiz)
Formation: unknown
Locality: Weinheim, Germany
Age: Upper Oligocene
Illustrate: Plate 6

No. 10048
Name: *Notorhynchus primigenius* (Agassiz)
Formation: Kirkwood Fm.
Locality: Shark River, New Jersey, USA
Age: Miocene
Illustrate: Plate 6(10048a~e)

No. 10049
Name: *Echinorhinus blakei* Agassiz
Formation: Pungo River Marl Fm.
Locality: T.G.S. North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 7(10049a~e)

No. 10050
Name: *Squalus* sp.
Formation: unknown
Locality: Hemixem, Belgium
Age: Eocene (Auversian)
Illustrate:

No. 10051
Name: *Squalus* sp.
Formation: unknown
Locality: Ouid Zem, Morocco
Age: Palaeocene (Thanetian)
Illustrate:

No. 10052
Name: *Squalus* sp.
Formation: unknown
Locality: Hemixem, Belgium
Age: Eocene (Auversien)
Illustrate:

No. 10053
Name: *Squalus* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10054
Name: *Pristiophorus* sp.
Formation: Temblor Fm.
Locality: Oildale, California, USA
Age: Miocene
Illustrate: Plate 7

No. 10055
Name: *Pristiophorus* sp.
Formation: Sant Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 7(10055a~e)

No. 10056
Name: *Pristiophorus* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate: Plate 7

No. 10057
Name: *Squatina hassei* Leriche
Formation: Mt.Laurel Fm.
Locality: Willow Brook, Colts Neck, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10058
Name: *Squatina* sp.
Formation: unknown
Locality: Crownsville, Hawkins Rd., Maryland, USA
Age: Upper Cretaceous
Illustrate:

No. 10059
Name: *Squatina* sp.
Formation: Peedee Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10060
Name: *Squatina* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10061
Name: *Squatina* sp.
Formation: unknown
Locality: Hardivillers, France
Age: Upper Cretaceous (Campanian)
Illustrate:

No. 10062
Name: *Squatina prima* (Winkler)
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10063
Name: *Squatina* sp. ?
Formation: unknown
Locality: Hemixem, Belgium
Age: Miocene (Anversien)
Illustrate:

No. 10064
Name: *Squatina* sp.
Formation: Sant Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 7

No. 10065
Name: *Squatina* sp.
Formation: unknown
Locality: Obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10066
Name: *Squatina* sp.
Formation: unknown
Locality: Orp le Grand, Belgium
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10067
Name: *Heterodontus* sp.
Formation: unknown
Locality: Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10068
Name: *Heterodontus* sp.
Formation: unknown
Locality: Orp le Grand, Belgium
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10069
Name: *Cretorectolobus olsoni* Case
Formation: Mesaverde Fm.
Locality: Worland, Wyoming, USA
Age: Upper Creaceous (Late Campanian)
Illustrate:

No. 10070
Name: *Ginglymostoma subafricanum* Arambourg
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10071
Name: *Ginglymostoma angolense* Dartevelle & Casier
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10072
Name: *Ginglymostoma* sp.
Formation: unknown
Locality: Bou-Jniba, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10073
Name: *Ginglymostoma globidens* Cappetta & Case
Formation: Matawan
Locality: Crownsville, Maryland, USA
Age: Upper Cretaceous
Illustrate:

No. 10074
Name: *Nebrius thielensis* (Winkler)
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate:

No. 10075
Name: *Nebrius blanckenhori* (Stromer)
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10076
Name: *Nebrius blanckenhorni* (Stromer)
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10077
Name: *Nebrius* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate:

No. 10078
Name: *Hypotodus robustus* (Leriche)
Formation: Blackheath Beds
Locality: Abbey Wood, Kent, England, UK
Age: Eocene
Illustrate: Plate 7(10078a~h)

No. 10079
Name: *Hypotodus robustus* (Leriche)
Formation: Woolrich Bottom Bed
Locality: Bishopstone, England, UK
Age: Eocene
Illustrate: Plate 7(10079a~c)

No. 10080
Name: *Hypotodus robustus* (Leriche)
Formation: Oldhaven Pebble Bed
Locality: Bishopstone, England, UK
Age: Eocene
Illustrate: Plate 7(10080a~c)

No. 10081
Name: *Hypotodus robustus* (Leriche)
Formation: Oldhaven Beds (Main series)
Locality: Shelford Sand Pit near Canterbury, Kent, England, UK
Age: Eocene
Illustrate: Plate 8(10081a~i)

No. 10082
Name: *Hypotodus robustw* (Leriche)
Formation: Tallahatta Fm.
Locality: Andalusia, Alabama, USA
Age: Early Middle Eocene
Illustrate: Plate 8

No. 10083
Name: *Odontaspis* sp.
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 11(10083a~e)

No. 10084
Name: *Odontaspis* sp.
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous and Tertiary
Illustrate:

No. 10085
Name: *Odontaspis* sp.
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate: Plate 12(10085a~i)

No. 10086
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Brickworks at Rumst, Belgium
Age: Miocene
Illustrate: Plate 1(6,7),9(10086a~h)

No. 10087
Name: *Odontaspis* sp.
Formation: unknown
Locality: Rt.35 Foodcircus, Middletown, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 12

No. 10088
Name: *Odontaspis* sp.
Formation: Modello
Locality: "Leisure World" housing project, El Toro, California, USA
Age: Miocene
Illustrate: Plate 12

No. 10089
Name: *Odontaspis* sp.
Formation: unknown
Locality: Senon Quedlinburg in Harz, Germany
Age: Upper Cretaceous (Senonian ?)
Illustrate:

No. 10090
Name: *Odontaspis verticalis* Agassiz
Formation: Bracklesham Beds
Locality: Bracklesham Bay, Sussex, England, UK
Age: Cretaceous
Illustrate: Plate 9

No. 10091
Name: *Carcharias steineri* (Case)
Formation: Mesaverde Fm.
Locality: Worland, Wyoming, USA
Age: Upper Cretaceous (Late Campanian)
Illustrate:

No. 10092
Name: *Odontaspis* sp.
Formation: unknown
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 12(10092a~d)

No. 10093
Name: *Odontaspis* sp.
Formation: Taylor Marl
Locality: N.Shlphur River, Ladoniia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 12(10093a~c)

No. 10094
Name: *Odontaspis* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10095
Name: *Odontaspis* sp.
Formation: Canonball Fm.
Locality: Moffit, North Dakota, USA
Age: Palaeocene
Illustrate:

No. 10096
Name: *Odontaspis* sp.
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate:

No. 10097
Name: *Odontaspis* sp.
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate:

No. 10098
Name: *Odontaspis crassidens* (Dixon)
Formation: London clay
Locality: Warden point, Isle of Sheppey, Kent, England, UK
Age: Eocene
Illustrate: Plate 9(10098a~m)

No. 10099
Name: *Synodontaspis (cuspidata) teretidens* White
Formation: Oldhaven Beds (Main series)
Locality: Shelford Sand Pit near Canterbury, Kent, England, UK
Age: Eocene
Illustrate: Plate 9(10099a~i)

No. 10100
Name: *Odontaspis* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 12(10100a~o)

No. 10101
Name: *Odontaspis* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 12(10101a~h)

No. 10102
Name: *Odontaspis* sp.
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 12(10102a~d)

No. 10103
Name: *Odontaspis* sp.
Formation: unknown
Locality: Bavaria, Germany
Age: Miocene
Illustrate: Plate 12

No. 10104
Name: *Odontaspis* sp.
Formation: unknown
Locality: Gainfarner Buchf near Bad Vosian, Austria
Age: Middle Miocene
Illustrate: Plate 12(10104a,b)

No. 10105
Name: *Odontaspis* sp.
Formation: unknown
Locality: Hopefield-Lancebaan, Cape Province, S. Africa
Age: Pliocene-Pleistocene ?
Illustrate: Plate 12

No. 10106
Name: *Odontaspis* sp.
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 12(10106a~d)

No. 10107
Name: *Odontaspis* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 12(10107a,b)

No. 10108
Name: *Odontaspis* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Upper Cretaceous
Illustrate: Plate 12(10108a~d)

No. 10109
Name: *Odontaspis* sp.
Formation: unknown
Locality: Belgium
Age: Upper Cretaceous
Illustrate: Plate 13(10109a,b)

No. 10110
Name: *Odontaspis* sp.
Formation: unknown
Locality: Obourg, Belgium
Age: Upper Cretaceous
Illustrate: Plate 13(10110a~d)

No. 10111
Name: *Odontaspis* sp.
Formation: unknown
Locality: Irrigation Pond, Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Certaceous (Middle Maastrichtian)
Illustrate: Plate 13

No. 10112
Name: *Odontaspis* sp.
Formation: Chalk
Locality: Kent, England, UK
Age: Upper Cretaceous
Illustrate: Plate 13(10112a,b)

No. 10113
Name: *Odontaspis* sp.
Formation: Taylor Marl Fm. (Brownstown Marl ?)
Locality: Bell Co., Sparks, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10114
Name: *Odontaspis* sp.
Formation: South Basque Fm. (Eagle Ford Shale)
Locality: McGregor, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10115
Name: *Odontaspis* sp.
Formation: Niobrara Fm.
Locality: Mitchell, South Dakota, USA
Age: Upper Cretaceous
Illustrate: Plate 13

No. 10116
Name: *Odontaspis* sp.
Formation: Eagle Ford Shale
Locality: Austin, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 13

No. 10117
Name: *Odontaspis* sp.
Formation: Creyson Fm. Washita Group, Comnanchian Series.
Locality: Denton Co., Texas, USA
Age: Lower Cretaceous
Illustrate:

No. 10118
Name: *Serratolamnas amonensis* (Cappetta & Case)
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 9(10118a~f)

No. 10119
Name: *Odontaspis* sp.
Formation: Carlisle Shale
Locality: Rawlins, Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10120
Name: *Odontaspis* sp.
Formation: Essener Greensand
Locality: Muhlheim, Germany
Age: Upper Cretaceous (Cenomanian)
Illustrate: Plate 13(10120a~d)

No. 10121
Name: *Odontaspis* sp.
Formation: Frontier Fm. (Carlile Shale)
Locality: Nowl, Wyoming, USA
Age: Upper Cretaceous
Illustrate: Plate 13(10121a,b)

No. 10122
Name: *Odontaspis* sp.
Formation: Duck Creek Limestone Fm.
Locality: Crayson County, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 13(10122a,b)

No. 10123
Name: *Odontaspis* sp.
Formation: Carlisle shale
Locality: Edgemont, South Dakota, USA
Age: Upper Cretaceous
Illustrate:

No. 10124
Name: *Odontaspis* sp.
Formation: Carlile Shale
Locality: Upton, Wyoming, Weston County, USA
Age: Cretaceous
Illustrate: Plate 13(10124a~c)

No. 10125
Name: *Odontaspis* sp.
Formation: unknown
Locality: Maret, Belgium
Age: Palaeocene (Landenian)
Illustrate: Plate 13(10125a~d)

No. 10126
Name: *Odontaspis* sp.
Formation: Aquia Fm.
Locality: Marlboro point, Virginia, USA
Age: Palaeocene/Eocene
Illustrate: Plate 13(10126a~d)

No. 10127
Name: *Odontaspis* sp.
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Palaeocene (Montian)
Illustrate: Plate 13(10127a~e)

No. 10128
Name: *Odontaspis* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Palaeocene (Montian)
Illustrate: Plate 13(10128a~g)

No. 10129
Name: *Odontaspis* sp.
Formation: unknown
Locality: K'Peme, Togo, Africa
Age: Eocene (Ypresian)
Illustrate: Plate 13(10129a~e)

No. 10130
Name: *Odontaspis* sp.
Formation: unknown
Locality: Metlaoui, Tunisia
Age: Eocene (Ypresian)
Illustrate: Plate 13(10130a~e)

No. 10131
Name: *Odontaspis* sp.
Formation: unknown
Locality: Oued Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 13(10131a~i)

No. 10132
Name: *Odontaspis* sp.
Formation: unknown
Locality: Stockpile in Town, at the Plant, Youssoufia, Morocco
Age: Eocene (Montian & Ypresian)
Illustrate: Plate 14(10132a~i)

No. 10133
Name: *Odontaspis* sp.
Formation: Kirkwood Fm.
Locality: Shark River, Neptune, New Jersey, USA
Age: Miocene
Illustrate: Plate 14(10133a~j)

No. 10134
Name: *Odontaspis* sp.
Formation: Shark River Marl
Locality: Shark River, Neptune, New Jersey, USA
Age: Eocene
Illustrate:

No. 10135
Name: *Odontaspis* sp.
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 14(10135a~i)

No. 10136
Name: *Odontaspis* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 1(12,13),14(10136a~g)

No. 10137
Name: *Odontaspis* sp.
Formation: unknown
Locality: Tranch@e R.E.I., Sidi-Daoui, Morocco
Age: Eocene (Thanetian-Ypresian)
Illustrate: Plate 14(10137a~c)

No. 10138
Name: *Odontaspis* sp.
Formation: Aquia Fm.
Locality: Belvedere Beach, Osso, Virginia, USA
Age: Eocene
Illustrate: Plate 14

No. 10139
Name: *Odontaspis* sp.
Formation: Vincentown Fm.
Locality: Church & Eayrestown Rd., Medford, New Jersey, USA
Age: Eocene
Illustrate: Plate 14(10139a~c)

No. 10140
Name: *Odontaspis* sp.
Formation: Clinchfield Sand, Claiborne Group
Locality: Quarry, Clinchfield, Georgia, USA
Age: Middle Eocene
Illustrate: Plate 14(10140a~e)

No. 10141
Name: *Odontaspis* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate: Plate 14(10141a~e)

No. 10142
Name: *Odontaspis* sp.
Formation: Aquia Fm. Piscataway member
Locality: Smith's point (Potomac river) near Liverpool PT., MD., USA
Age: Eocene
Illustrate: Plate 14(10142a,b)

No. 10143
Name: *Odontaspis* sp.
Formation: Helmick Hill Fm.
Locality: Monmouth, Oregon, USA
Age: Eocene
Illustrate:

No. 10144
Name: *Odontaspis* sp.
Formation: Ocala Limestone
Locality: Sandersville, Georgia, USA
Age: Late Eocene
Illustrate: Plate 14(10144a~e)

No. 10145
Name: *Odontaspis* sp.
Formation: unknown
Locality: 3 miles near Malvern, Hot Springs Co., Arkansas, USA
Age: Eocene
Illustrate: Plate 15(10145a~e)

No. 10146
Name: *Odontaspis* sp.
Formation: unknown
Locality: Sankt Pankraz near Hanunsberg, Salzburg, Austria
Age: Eocene (Lutetian ?)
Illustrate: Plate 15(10146a,b)

No. 10147
Name: *Odontaspis* sp.
Formation: unknown
Locality: Washout area at foot of cliff, Arkansas, USA
Age: Eocene
Illustrate: Plate 15(10147a,b)

No. 10148
Name: *Odontaspis* sp.
Formation: Cooper Marl (Jackson Group)
Locality: Hawkinsville, Georgia, USA
Age: Upper Eocene - Lower Oligocene
Illustrate: Plate 15(10148a~c)

No. 10149
Name: *Odontaspis* sp.
Formation: Barton Beds
Locality: Barton, Sussex, England, UK
Age: Eocene
Illustrate: Plate 15(10149a~c)

No. 10150
Name: *Odontaspis* sp.
Formation: unknown
Locality: Subway Constraction site Brussells, Belgium
Age: Eocene (Lutetian)
Illustrate: Plate 15(10150a~c)

No. 10151
Name: *Odontaspis* sp.
Formation: unknown
Locality: Ghilm, Belgium
Age: Eocene (Ypresian)
Illustrate: Plate 15(10151a~d)

No. 10152
Name: *Odontaspis* sp.
Formation: unknown
Locality: Foret Des Bruxelles, Belgium
Age: Eocene (Ypresian)
Illustrate:

No. 10153
Name: *Odontaspis* sp.
Formation: Clinchfield Sands
Locality: Georgia, USA
Age: Late Eocene
Illustrate: Plate 15(10153a,b)

No. 10154
Name: *Odontaspis* sp.
Formation: Red Crag Bed
Locality: Suffolk, England, UK
Age: Eocene
Illustrate: Plate 15(10154a,b)

No. 10155
Name: *Odontaspis* sp.
Formation: Santee Marl
Locality: Harleyville, South Carolina, USA
Age: Eocene
Illustrate: Plate 15(10154a~c)

No. 10156
Name: *Odontaspis* sp.
Formation: Bracklesham Beds
Locality: Bracklesham Bay, England, UK
Age: Eocene
Illustrate: Plate 15(10156a~c)

No. 1O157
Name: *Odontaspis* sp.
Formation: unknown
Locality: Medford, New Jersey, USA
Age: Eocene
Illustrate:

No. 10158
Name: *Odontaspis* sp.
Formation: unknown
Locality: Pick County, Alabama, USA
Age: Palaeocene
Illustrate: Plate 15(10158a,b)

No. 10159
Name: *Odontaspis* sp.
Formation: unknown
Locality: Abandoned Trench at Entrance to Old Recette, Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 15(10159a~e)

No. 10160
Name: *Odontaspis* sp.
Formation: unknown
Locality: Hemixem, Belgium
Age: Oligocene (Rupelien)
Illustrate: Plate 15

No. 10161
Name: *Odontaspis* sp.
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt.17, GA., USA
Age: Miocene / Pliocene
Illustrate: Plate 15(10161a,b)

No. 10162
Name: *Odontaspis* sp.
Formation: unknown
Locality: I-95 Construction at White Oak,Camden Co., off Rt.17, GA., USA
Age: Miocene / Pliocene
Illustrate: Plate 15(10162a~d)

No. 10163
Name: *Odontaspis* sp.
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate: Plate 15

No. 10164
Name: *Odontaspis* sp.
Formation: unknown
Locality: Manganese Mine on the Island of Cuba
Age: Miocene ?
Illustrate: Plate 15(10164a~c)

No. 10165
Name: *Odontaspis* sp.
Formation: Calvert Fm.
Locality: Potomac River, Charles County, Maryland, USA
Age: Miocene
Illustrate: Plate 15(10165a,b)

No. 10166
Name: *Odontaspis* sp.
Formation: Hawthorne Fm. ?
Locality: Edisto Beach, South Carolina, USA
Age: Miocene
Illustrate: Plate 15

No. 10167
Name: *Odontaspis* sp.
Formation: Hawthorne Fm.
Locality: Murrell's inlet, Garden city, South Carolina, USA
Age: Miocene
Illustrate:

No. 10168
Name: *Odontaspis* sp.
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate: Plate 15

No. 10169
Name: *Odontaspis* sp.
Formation: Vascos Fm.
Locality: Scotts Valley, California, USA
Age: Miocene
Illustrate: Plate 15

No. 10170
Name: *Odontaspis* sp.
Formation: Temblor Fm.
Locality: Cuyama, California, USA
Age: Miocene
Illustrate: Plate 15(10170a~c)

No. 10171
Name: *Odontaspis* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate: Plate 15(10171a,b)

No. 10172
Name: *Odontaspis* sp.
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate: Plate 16(10172a,b)

No. 10173
Name: *Odontaspis* sp.
Formation: unknown
Locality: Deloen, Netherlands
Age: Miocene
Illustrate: Plate 16(10173a~c)

No. 10174
Name: *Odontaspis* sp.
Formation: unknown
Locality: Balagem, Belgium
Age: Miocene
Illustrate: Plate 16(10174a~f)

No. 10175
Name: *Odontaspis* sp.
Formation: Hawthorne Fm. ?
Locality: Giant Portland Quarry, South Carolina, USA
Age: Miocene
Illustrate: Plate 16(10175a,b)

No. 10176
Name: *Odontaspis* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate: Plate 16(10176a~c)

No. 10177
Name: *Odontaspis* sp.
Formation: Hawthorne(?)
Locality: Jacksonville, Florida, USA
White shell channel cut-dredgings.
Age: Miocene
Illustrate: Plate 16(10177a~c)

No. 10178
Name: *Odontaspis* sp.
Formation: unknown
Locality: Melkbos, Cape Province, South Africa
Age: Miocene
Illustrate: Plate 16(10178a~c)

No. 10179
Name: *Odontaspis* sp.
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene (Helvetian)
Illustrate: Plate 16(10179a~c)

No. 10180
Name: *Odontaspis* sp.
Formation: unknown
Locality: Newport bay, California, USA
Age: Pliocene
Illustrate:

No. 10181
Name: *Odontaspis* sp.
Formation: unknown
Locality: Boom, Belgium
Age: Pliocene
Illustrate: Plate 16(10181a,b)

No. 10182
Name: *Odontaspis* sp.
Formation: unknown
Locality: Belagem, Belgium
Age: Pliocene
Illustrate: Plate 16(10182a,b)

No. 10183
Name: *Odontaspis* winkleri Leriche
Formation: Barton beds
Locality: Hampshire, England, UK
Age: Eocene
Illustrate: Plate 1(4,5),8(10183a~m)

No. 10184
Name: *Odontaspis* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10185
Name: *Odontaspis* sp. ?
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10186
Name: *Odontaspis* sp.
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate:

No. 10187
Name: *Odontaspis* sp.
Formation: Navesink (derived)
Locality: Tributary Parallel to Ramanesson Brook opposite the Old Mill & waterfall in the Big Meadow on Harding Property (Hop Brook), New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10188
Name: *Odontaspis* sp.
Formation: Santon Pinniformis Schichten
Locality: Weiner Esch, Germany
Age: Upper Cretaceous
Illustrate:

No. 10189
Name: *Odontaspis* sp.
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 16(10189a,b)

No. 10190
Name: *Odontaspis* sp.
Formation: unknown
Locality: South Carolina, USA
Age: Eocene
Illustrate: Plate 16(10190a~c)

No. 10191
Name: *Odontaspis* sp.
Formation: Manasquan Marl
Locality: Manasquan River, New Jersey, USA
Age: Eocene
Illustrate:

No. 10192
Name: *Odontaspis* sp.
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate: Plate 16(10192a~c)

No. 10193
Name: *Odontaspis* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 16(10193a~h)

No. 10194
Name: *Odontaspis* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate:

No. 10195
Name: *Odontaspis* sp.
Formation: unknown
Locality: Savannah, Georgia, USA
Age: Miocene
Illustrate: Plate 16(10195a,b)

No. 10196
Name: *Odontaspis* sp.
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous & Tertiary
Illustrate: Plate 16(10196a~d)

No. 10197
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Te Whanga Lagoon, Blind Jim's Creek, (mouth of Creek) Chatham Islands, New Zealand
Age: Eocene
Illustrate: Plate 30(10197a~d)

No. 10198
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 30(10198a~c)

No. 10199
Name: *Striatolamia macrota* (Agassiz)
Formation: Aquia Fm.
Locality: Belvedere Beach, Virginia, USA
Age: Eocene
Illustrate: Plate 30;1973 Case;p.32~33 pl.118

No. 10200
Name: *Striatolamia macrota* (Agassiz)
Formation: Aquia Fm.
Locality: Belvidere Beach, Virginia, USA
Age: Eocene
Illustrate: Plate 30

No. 10201
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Paris Basin, France
Age: Eocene
Illustrate: Plate 30

No. 10202
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Barton on the sea, Hampshire, England, UK
Age: Eocene (Mid Bartonian)
Illustrate: Plate 30(10202a~d)

No. 10203
Name: *Striatolamia macrota* (Agassiz)
Formation: Barton Beds
Locality: Hampshire, England, UK
Age: Eocene (Bartonian)
Illustrate: Plate 30(10203a,b)

No. 10204
Name: *Striatolamia striata* (Winkler)
Formation: Blackheath Beds
Locality: Abbey Wood, London, England, UK
Age: Eocene
Illustrate: Plate 30(10204a~e)

No. 10205
Name: *Striatolamia macrota* (Agassiz)
Formation: London Clay
Locality: Isle of Sheppey, Kent, England, UK
Age: Eocene
Illustrate: Plate 30(10205a~c)

No. 10206
Name: *Striatolamia striata* (Winkler)
Formation: Oldhaven Pebble Bed
Locality: Bishopstone Coast Section, near Herne Bay, Kent, England, UK
Age: Eocene
Illustrate: Plate 30(10206a,b)

No. 10207
Name: *Striatolamia striata* (Winkler)
Formation: Oldhaven Beds (Main series)
Locality: Shelford, England, UK
Age: Eocene
Illustrate: Plate 30(10207a~e)

No. 10208
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Subway Construction site, Brussells, Belgium
Age: Eocene (Lutetian)
Illustrate: Plate 31(10208a,b)

No. 10209
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Wolume, Bruxelles, Belgium
Age: Eocene (Ledian)
Illustrate: Plate 31(10209a,b)

No. 10210
Name: *Striatolamia striata* (Winkler)
Formation: unknown
Locality: unknown
Age: Eocene (Ypresian)
Illustrate: Plate 30(10210a~f)

No. 10211
Name: *Striatolamia macrota* (Agassiz)
Formation: Peedee
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Eocene
Illustrate: Plate 31(10211a~c)

No. 10212
Name: *Striatolamia* sp.
Formation: Zone of Cardita planicosta
Locality: Washed ashore, Cadzand, Netherlands
Age: Eocene
Illustrate:

No. 10213
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: North Carolina, USA
Age: Eocene
Illustrate: Plate 31(10213a~d)

No. 10214
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Belgium
Age: Eocene (Lutetian ?)
Illustrate: Plate 31(10214a~c)

No. 10215
Name: *Striatolamia macrota* (Agassiz)
Formation: Aquia Fm. Piscataway member
Locality: Smith's point, Potomac river near Liverpool PT., MD., USA
Age: Eocene
Illustrate: Plate 31(10215a~c)

No. 10216
Name: *Striatolamia macrota* (Agassiz)
Formation: Castle Hayne Limestone
Locality: Fussel pit near Rosehill, North Carolina, USA
Age: Eocene
Illustrate: Plate 31

No. 10217
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Mt.Selman, Texas, USA
Age: Late Eocene
Illustrate: Plate 31(10217a~d)

No. 10218
Name: *Striatolamia macrota* (Agassiz)
Formation: Stone city Fm., Claiborne Group.
Locality: Moseley's Ferry N.W. Burleson Co.,Texas, USA
Age: Eocene
Illustrate: Plate 31

No. 10219
Name: *Striatolamia* sp.
Formation: Blackheath Beds
Locality: Abbey Wood, Kent, England, UK
Age: Palaeocene
Illustrate: Plate 32(10219a,b)

No. 10220
Name: *Striatolamia* sp.
Formation: Blackheath Beds
Locality: Abbey Wood, London, England, UK
Age: Palaeocene
Illustrate: Plate 32(10220a,b)

No. 10221
Name: *Striatolamia* sp.
Formation: Blackheath Beds
Locality: Abbey Wood, Kent(suburb of London), England, UK
Age: Palaeocene
Illustrate: Plate 32(10221a,b)

No. 10222
Name: *Striatolamia macrota* (Agassiz)
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone ⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Eocene
Illustrate: Plate 31(10222a~c)

No. 10223
Name: *Striatolamia macrota* (Agassiz)
Formation: Waccamaw Fm.
Locality: Surrat (Dunn) Farm Shallow, North Carolina, USA
Age: Pliocene
Illustrate: Plate 31

No. 10224
Name: *Striatolamia macrota* (Agassiz)
Formation: Aquia Fm.
Locality: Aquia Creek & Belvidere Beach, Virginia, USA
Age: Early Eocene
Illustrate: Plate 31(10224a~d)

No. 10225
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Brussells, Belgium
Age: Eocene (Lutetian, Bruxellian)
Illustrate: Plate 31(10225a~e)

No. 10226
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Subway Constraction site Brussells, Belgium
Age: Eocene (Lutetian)
Illustrate: Plate 31(10226a~d)

No. 10227
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Ghilm, Belgium
Age: Eocene (Ypresian)
Illustrate: Plate 31

No. 10228
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Foret Des Bruxelles, Belgium
Age: Eocene (Ypresian)
Illustrate: Plate 31

No. 10229
Name: *Striatolamia macrota* (Agassiz)
Formation: Bracklesham Beds
Locality: Bracklesham Bay, England, UK
Age: Eocene
Illustrate: Plate 32(10229a,b)

No. 10230
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Hemixem, Belgium
Age: Oligocene (Rupelian)
Illustrate: Plate 32

No. 10231
Name: *Striatolamia macrota* (Agassiz)
Formation: unknown
Locality: Balagem, Belgium
Age: Miocene
Illustrate: Plate 24(10231a~p)

No. 10232
Name: *Striatolamia macrota* (Agassiz)
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate: Plate 32(10232a~c)

No. 10233
Name: *Synodontaspis vincenti* (Winkler)
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 32

No. 10234
Name: *Synodontaspis substriata* (Stromer)
Formation: unknown
Locality: Maret En Herbaye, Belgium
Age: Eocene (Ledian)
Illustrate:

No. 10235
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: unknown
Locality: Woluwe, Brussells, Belgium
Age: Eocene (Ledian)
Illustrate: Plate 32(10235a,b)

No. 10236
Name: *Synodontaspis macrota* (Agassiz)
Formation: unknown
Locality: Woluwe, Brussells, Belgium
Age: Eocene (Ledian)
Illustrate: Plate 23(10236a,b)

No. 10237
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: unknown
Locality: Wolume, Bruxelles, Belgium
Age: Eocene (Ledian)
Illustrate: Plate 25(10237a,b)

No. 10238
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: unknown
Locality: Weinheim, Germany
Age: Upper Oligocene
Illustrate: Plate 32(10238a~c)

No. 10239
Name: *Synodontaspis acutissima* (Agassiz)
Formation: unknown
Locality: Weinheim, Germany
Age: Upper Oligocene
Illustrate: Plate 32(10239a~c)

No. 10240
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: Brown-coal pits of Espenhain.
Locality: Leipzig, Espenhain, Germany
Age: Oligocene
Illustrate: Plate 32(10240a,b)

No. 10241
Name: *Synodontaspis acutissima* (Agassiz)
Formation: Brown-coal pits of Espenhain.
Locality: Leipzig, Espenhain, Germany
Age: Oligocene
Illustrate: Plate 32(10241a~c)

No. 10242
Name: *Synodontaspis teretidens* White
Formation: Blackheath Beds
Locality: Abbey Wood, England, UK
Age: Eocene (Lower Ypresian)
Illustrate: Plate 32(10242a,b)

No. 10243
Name: *Synodontaspis cuspidata* (Agassiz)
Formation: Santon Pinniformis Schichten
Locality: Germany
Age: Oligocene
Illustrate: Plate 32(10243a,b)

No. 10244
Name: *Anomotodon* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10245
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate: Plate 32(10245a~d)

No. 10246
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Navesink - Mt. Laurel
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 32

No. 10247
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: "Hop Brook" Holmdel, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 33(10247a~h)

No. 10248
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Merchantville Fm.
Locality: Spoil banks, Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 32(10248a,b),33(10248a,b)

No. 10249
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Navesink - Mt.Laurel
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 33

No. 10250
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Taylor Marl
Locality: N.Sulphur River, Ladonia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10250a~d)

No. 10251
Name: *Scapanorhynchus* sp. (vertebral centrum)
Formation: Merchantville Fm.
Locality: St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Case (1973) p.53,fig.222

No. 10252
Name: *Scapanorhynchus* sp. & *Squalicorax* sp.
Formation: Greenhorn L/S Fm.
Locality: 1 mi. S.E. of Getmore, Kansas, USA
Age: Upper Cretaceous
Illustrate:

No. 10253
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: Bettrechies, France
Age: Cretaceous (Turonian)
Illustrate: Plate 33

No. 10254
Name: *Scapanorhynchus* sp.
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate:

No. 10255
Name: *Scapanorhynchus* sp.
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landenian)
Illustrate:

No. 10256
Name: *Scapanorhynchus texanus* (Roemer) <Mitsukurina>
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 33(10256a,b)

No. 10257
Name: *Scapanorhynchus* sp.
Formation: Niobrara Fm. Tempas Member Limestone
Locality: Morrison, Colorado, USA
Age: Upper Cretaceous
Illustrate: Plate 33

No. 10258
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: Irrigation Pond Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 33(10258a,b)

No. 10259
Name: *Scapanorhynchus* sp.
Formation: South Basque Fm. (Eagle Ford Shale)
Locality: McGregor, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10260
Name: *Scapanorhynchus* sp.
Formation: Green Horn Limestone Fm.
Locality: West of Newcastle, Eastern Wyoming, USA
Age: Upper Cretaceous
Illustrate: Plate 33

No. 10261
Name: *Scapanorhynchus* sp.
Formation: Eagle Foul Shale
Locality: At Arcadia park & Cockerell Hill Rd. Dallas County, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10262
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Tombigbee Sand Member, Eutaw Fm.
Locality: Barton's Bluff, West Point, Mississippi, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10262a,b)

No. 10263
Name: *Scapanorhynchus* sp.
Formation: Niobrara Fm.
Locality: Mitchell, South Dakota, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10263a,b)

No. 10264
Name: *Scapanorhynchus* sp.
Formation: Austin Chalk or Eagle Ford Shale
Locality: On Edge of Lake Texhoma, S.W. of Pottsboro, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10265
Name: *Scapanorhynchus* sp.
Formation: Merchantville Fm.
Locality: Maple Shade, Old Graham Brickyard, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10265a,b)

No. 10266
Name: *Scapanorhynchus* sp.
Formation: unknown
Locality: 13 miles N.W. of Alden, Kansas, USA
Age: Early Cretaceous
Illustrate:

No. 10267
Name: *Scapanorhynchus texanus* (Roemer)
Formation: unknown
Locality: Wilson Farm, Allentown, New Jersey, USA (Irrigation Pond dredgings)
Age: Upper Cretaceous
Illustrate: Plate 33

No. 10268
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10268a,b)

No. 10269
Name: *Scapanorhynchus texanus* (Roemer)
Formation: Navesink (derived)
Locality: Tributary Parallel to Ramanesson Brook opposite the Old Mill & waterfall in the Big Meadow on Harding Prop., New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 33(10269a,b)

No. 10270
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 33

No. 10271
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: Intracoastal waterway near Myrtle Beach, South Carolina, USA
Age: Cretaceous - Miocene ?
Illustrate: Plate 33(10271a,b)

No. 10272
Name: *Carcharodon carcharias* (Linnaeus)
Formation: Sisquoc Fm.
Locality: Orcutt, California, USA
Age: Miocene
Illustrate: Plate 34(10272a~c)

No. 10273
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 34(10273a~d)

No. 10274
Name: *Carcharodon* sp.
Formation: Red Crag Bed
Locality: Suffolk, England, UK
Age: Eocene
Illustrate: Plate 34

No. 10275
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: I-95 Construction at White Oak, Camden Co., off Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 33,34(10275a,b)

No. 10276
Name: *Carcharodon carcharias* (Linnaeus)
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate: Plate 34(10276a,b)

No. 10277
Name: *Carcharodon* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate: Plate 34

No. 10278
Name: *Carcharodon carcharias* (Linnaeus)
Formation: Hawthorne(?)
Locality: Jacksonville, Florida, USA
White shell channel cut-dredgings.
Age: Miocene
Illustrate: Plate 34(10278a~d)

No. 10279
Name: *Carcharodon* sp.
Formation: unknown
Locality: Melkbos, Cape Province, South Africa
Age: Miocene
Illustrate: Plate 34(10279a~c)

No. 10280
Name: *Carcharodon carcharias* (Linnaeus)
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 34

No. 10281
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 35(10281a~c)

No. 10282
Name: *Isurus* sp.
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate: Plate 37

No. 10283
Name: *Isurus* sp.
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Tertiary
Illustrate: Plate 37(10283a,b)

No. 10284
Name: *Isurus praecursor* (Leriche)
Formation: Castle Hayne Fm.
Locality: Rosehill, North Carolina, USA
Age: Eocene (Ypresian ?)
Illustrate: Plate 36(10284a~c)

No. 10285
Name: *Isurus* sp.
Formation: C2 Phosphate Bed Mid Globigerina Limestone.
Locality: Gnejna valley, Island of Malta
Age: Miocene
Illustrate: Plate 23(10285a~c)

No. 10286
Name: *Isurus macrorhiza* Pictet & Campiche
Formation: Cambridge Greensand
Locality: Mill Road Cementworks, Cambridge, England, UK
Age: Upper Cretaceous
Illustrate: Plate 37(10286a,b)

No. 10287
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Kallo, Belgium
Age: Miocene
Illustrate: Plate 34(10287a~c)

No. 10288
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 36(10288a,b)

No. 10289
Name: *Isurus hastalis* (Agassiz)
Formation: Santa Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 34(10289a~c)

No. 10290
Name: *Isurus praecursor* (Leriche)
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone x Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Eocene
Illustrate: Plate 36(10290a,b)

No. 10291
Name: *Isurus hastalis* (Agassiz)
Formation: Red Crag Bed
Locality: Suffolk, England, UK
Age: Eocene
Illustrate: Plate 36

No. 10292
Name: *Isurus hastalis* (Agassiz)
Formation: Santee Marl
Locality: Harleyville, South Carolina, USA
Age: Eocene
Illustrate: Plate 34(10292a~c)

No. 10293
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: I-95 Construction at White Oak, Camden Co., off Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 35(10293a~d)

No. 10294
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt. 17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 36(10294a~c)

No. 10295
Name: *Isurus hastalis* (Agassiz)
Formation: Calvert Fm.
Locality: Potomac River, Charles County, Maryland, USA
Age: Miocene
Illustrate:

No. 10296
Name: *Isurus hastalis* (Agassiz)
Formation: Hawthorne Fm. ?
Locality: Edisto Beach, South Carolina, USA
Age: Miocene
Illustrate:

No. 10297
Name: *Isurus* sp.
Formation: Hawthorne Fm.
Locality: Murrell's inlet, Garden city, South Carolina, USA
Age: Miocene
Illustrate:

No. 10298
Name: *Isurus* sp.
Formation: Vascos Fm.
Locality: Scotts Valley, California, USA
Age: Miocene
Illustrate: Plate 37(10298a,b)

No. 10299
Name: *Isurus* sp.
Formation: Temblor Fm.
Locality: Cuyama, California, USA
Age: Miocene
Illustrate: Plate 37

No. 10300
Name: *Isurus* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate: Plate 37

No. 10301
Name: *Isurus planus* (Agassiz)
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate: Plate 23(10301a~h)

No. 10302
Name: *Isurus hastalis* (Agassiz)
Formation: unknown
Locality: Deloen, Netherlands
Age: Miocene
Illustrate: Plate 36(10302a~d)

No. 10303
Name: *Isurus* sp.
Formation: Hawthorne Fm. ?
Locality: Giant Portland Quarry, South Carolina, USA
Age: Miocene
Illustrate: Plate 37(10303a,b)

No. 10304
Name: *Isurus* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate: Plate 37(10304a,b)

No. 10305
Name: *Isurus hastalis* (Agassiz)
Formation: Hawthorne(?)
Locality: White shell channel cut-dredgings, Jacksonville, Florida, USA
Age: Miocene
Illustrate: Plate 36(10305a~c)

No. 10306
Name: *Isurus* sp.
Formation: unknown
Locality: Melkbos, Cape Province, South Africa
Age: Miocene
Illustrate: Plate 37

No. 10307
Name: *Isurus hastalis* (Agassiz)
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 36(10307a~c)

No. 10308
Name: *Isurus* sp.
Formation: unknown
Locality: Boom, Belgium
Age: Pliocene
Illustrate: Plate 37(10308a,b)

No. 10309
Name: *Isurus* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Lee Creek, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 37

No. 10310
Name: *Isurus hastalis* (Agassiz)
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 36(10310a,b)

No. 10311
Name: *Isurus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 37(10311a,b)

No. 10312
Name: *Isurus* sp.
Formation: unknown
Locality: Savannah, Georgia, USA
Age: Miocene
Illustrate:

No. 10313
Name: *Lamna* sp.
Formation: Pungo River Marl Fm.
Locality: Aurora, North Carolina, USA
Age: Middle Miocene (Helvetian)
Illustrate: Plate 37

No. 10314
Name: *Xiphodolamia ensis* Leidy
Lower Jaw anterior tooth
Formation: Shark River Marl Fm.
Locality: Shark River, Neptune, New Jersey, USA
Age: Early Eocene (Ypresian)
Illustrate: Plate 37

No. 10315
Name: *Cretodus* sp.
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate: Plate 37

No. 10316
Name: *Cretodus* sp.
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate:

No. 10317
Name: *Cretodus (Plicatolamna) arcuata* (Woodward)
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 37(10317a~c)

No. 10318
Name: *Cretodus (Plicatolamna) arcuata* (Woodward)
Formation: unknown
Locality: Obourg, Belgium
Age: Upper Cretaceous
Illustrate: Plate 37(10318a,b)

No. 10319
Name: *Cretodus arcuata* (Woodward)
Formation: Navesink Fm.
Locality: Marlboro, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 37

No. 10320
Name: *Cretodus (Plicatolamna) arcuata* (Woodward)
Formation: unknown
Locality: Irrigation Pond Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Certaceous (Middle Maastrichtian)
Illustrate: Plate 37(10320a,b)

No. 10321
Name: *Cretodus* sp.
Formation: Chalk
Locality: Kent, England, UK
Age: Upper Cretaceous
Illustrate: Plate 37

No. 10322
Name: *Cretodus* sp.
Formation: Eagle Ford Shale
Locality: Austin, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10323
Name: *Cretodus* sp.
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 37

No. 10324
Name: *Cretodus arcuata* (Woodward)
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 37(10324a,b)

No. 10325
Name: *Cretodus arcuata* (Woodward)
Formation: Navesink (derived)
Locality: Tributary Parallel to Ramanesson Brook opposite the Old Mill & waterfall in the Big Meadow on Harding Property (Hop Brook),New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 37

No. 10326
Name: *Plicatolamna (Cretodus) arcuata* (Woodward)
Formation: Mesaverde Fm.
Locality: Worland, Wyoming, USA
Age: Upper Cretaceous (Late Campanian)
Illustrate: Plate 37(10326a,b)

No. 10327
Name: *Plicatolamna (Cretodus) arcuata* (Woodward)
Formation: Navesink Fm.
Locality: Holmdel, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 37(10327a,b)

No. 10328
Name: *Cretolamna appndiculata* (Agassiz)
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate:

No. 10329
Name: *Cretolamna* sp.
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10330
Name: *Cretolamna biauriculata* var. *C. maroccana* (Arambourg)
Formation: unknown
Locality: Khouribga, Ouled Abdoun Basin, Morocco
Age: Cretaceous
Illustrate: Plate 38(10330a,b)

No. 10331
Name: *Cretolamna caraibaea* var. *C. africana* (Dartevelle & Casier)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38(10331a,b)

No. 10332
Name: *Cretolamna woodwardi* Herman
Formation: Cambridge Greensand
Locality: Millroad Cementworks, Cambridge, England, UK
Age: Upper Cretaceous (Albian ?)
Illustrate: Plate 38(10332a,b)

No. 10333
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Cambridge Greensand
Locality: Millroad Cementworks,Cambridge, England, UK
Age: Upper Cretaceous
Illustrate: Plate 37(10333a~c)

No. 10334
Name: *Cretolamna sulcata* (Geinitz)
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10335
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Upper Chalk (Mucronata zone)
Locality: Cotton Grove, Norwich, Norfolk, England, UK
Age: Cretaceous
Illustrate: Plate 37

No. 10336
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Chalk Beds
Locality: Ruxley, Kent, England, UK
Age: Cretaceous
Illustrate: Plate 37(10336a,b)

No. 10337
Name: *Cretolamna biauriculata* (Wanner)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38(10337a,b)

No. 10338
Name: *Serratolamna serrata* (Agassiz)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38(10338a,b)

No. 10339
Name: *Cretolamna* sp.
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10340
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Taylor Marl
Locality: N.Sulphur River, Ladoniia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 37(10340a,b)

No. 10341
Name: *Cretolamna appendiculata* (Agassiz)
Formation: unknown
Locality: Bettrechies, France
Age: Cretaceous (Turonian)
Illustrate: Plate 38

No. 10342
Name: *Cretolamna appendiculata* (Agassiz)
Formation: unknown
Locality: L'Oued Zem, South East of Casablanca, Morocco
Age: Eocene (Landanian)
Illustrate:

No. 10343
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 38

No. 10344
Name: *Cretolamna appendiculata* (Agassiz)
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene
Illustrate: Plate 38

No. 10345
Name: *Cretolamna* sp.
Formation: unknown
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10346
Name: *Cretolamna* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10347
Name: *Cretolamna* sp.
Formation: unknown
Locality: Crownsville, Maryland, USA
Age: Upper Middle Eocene
Illustrate:

No. 10348
Name: *Cretolamna* sp.
Formation: unknown
Locality: Kallo Bei Antwerpen, Belgium
Age: Miocene
Illustrate: Plate 38

No. 10349
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 38

No. 10350
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate:

No. 10351
Name: *Cretolamna* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate:

No. 10352
Name: *Cretolamna* sp.
Formation: unknown
Locality: 13 km so. from Khouribga on the road to Fikh-Ben-Salah, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 38

No. 10353
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: 13 km so. from Khouribga on the road to Fikh-Ben-Salah, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 38

No. 10354
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceuos (Maastrichtian)
Illustrate: Plate 38(10354a,b)

No. 10355
Name: *Cretolamna biauriculata maroccana* Arambourg
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceuos (Maastrichtian)
Illustrate: Plate 38(10355a,b)

No. 10356
Name: *Cretolamna* sp. (Mixed)
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceuos (Maastrichtian)
Illustrate: Plate 38(10356a,b)

No. 10357
Name: *Cretolamna* sp.
Formation: unknown
Locality: Below Dam, Waco, Texas, USA
Age: Upper Cretaceous (Coniacian)
Illustrate: Plate 38

No. 10358
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: Foum Tizi, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38

No. 10359
Name: *Cretolamna biauriculata* var. *C. maroccana* Arambourg
Formation: unknown
Locality: Foum Tizi, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38

No. 10360
Name: *Cretolamna appendiculata* (Agassiz)
Formation: unknown
Locality: Irrigation Pond Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Certaceous (Middle Maastrichtian)
Illustrate: Plate 38(10360a,b)

No. 10361
Name: *Cretolamna* sp.
Formation: Taylor Marl Fm. (Brownstown Marl ?)
Locality: Bell Co., Sparks, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10362
Name: *Cretolamna* sp.
Formation: Green Horn Limestone Fm.
Locality: Eastern Wyoming, West of Newcastle, USA
Age: Upper Cretaceous
Illustrate:

No. 10363
Name: *Cretolamna* sp.
Formation: Eagle Foul Shale
Locality: At Arcadia park & Cockerell Hill Rd. Dallas County, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10364
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Tombigbee Sand Member, Eutaw Fm.
Locality: Barton's Bluff, West Point, Mississippi, USA
Age: Upper Cretaceous
Illustrate: Plate 38(10364a,b)

No. 10365
Name: *Cretolamna* sp.
Formation: Niobrara Fm.
Locality: Mitchell, South Dakota, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10366
Name: *Cretolamna* sp.
Formation: Austin Chalk or Eagle Ford Shale
Locality: On Edge of Lake Texhoma, S.W. of Pottsboro, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10367
Name: *Cretolamna* sp.
Formation: Chalk Beds
Locality: Dunton Green, Kent, England, UK
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10368
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Navesink Fm. ?
Locality: Shipley Farm, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10369
Name: *Cretolamna* sp.
Formation: Creyson Fm. Washita Group, Comatichfan Series.
Locality: Denton Co., Texas, USA
Age: Lower Cretaceous
Illustrate:

No. 10370
Name: *Cretolamna* sp.
Formation: H.orbignyi Subzone (Gault Clay)
Locality: Ford Place, Kent, England, UK
Age: Upper Cretaceous
Illustrate:

No. 10371
Name: *Cretolamna* sp.
Formation: Carlisle Shale
Locality: Rawlins, Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10372
Name: *Cretolamna* sp.
Formation: Essener Greensand
Locality: Muhlheim, Germany
Age: Upper Cretaceous (Cenomanian)
Illustrate: Plate 38

No. 10373
Name: *Cretolamna* sp.
Formation: Frontier Fm. (Carlile Shale)
Locality: Nowl, Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10374
Name: *Cretolamna* sp.
Formation: Duck Creek Limestone Fm.
Locality: Crayson County, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10375
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Navesink Fm.
Locality: Nutt Farm, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10376
Name: *Serratolamna serrata* (Agassiz)
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38

No. 10377
Name: *Cretolamna biauriculata* var. *C. maroccana* (Arambourg)
Formation: unknown
Locality: Tranchee R.E.I., Sidi Daoui, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10378
Name: *Cretolamna* sp
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10379
Name: *Cretolamna* sp.
Formation: Carlisle Shale
Locality: Edgemont, South Dakota, USA
Age: Upper Cretaceous
Illustrate:

No. 10380
Name: *Cretolamna* sp.
Formation: Carlile Shale
Locality: Weston County, Upton, Wyoming, USA
Age: Cretaceous
Illustrate:

No. 10381
Name: *Cretolamna* sp.
Formation: Carlisle Shale
Locality: Upton, Wyoming, USA
Age: Cretaceous
Illustrate:

No. 10382
Name: *Cretolamna* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Palaeocene (Montian)
Illustrate: Plate 26(10382a~t)

No. 10383
Name: *Cretolamna aschersoni* (Stromer)
Formation: unknown
Locality: Metlaoui, Tunisia
Age: Eocene (Ypresian)
Illustrate: Plate 38(10383a,b)

No. 10384
Name: *Cretolamna* sp.
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 38(10384a,b)

No. 10385
Name: *Cretolamna* sp.
Formation: unknown
Locality: Youssoufia (Louis Gentil) Stockpile in Town at the Plant, Morocco
Age: Eocene (Montian & Ypresian)
Illustrate: Plate 38

No. 10386
Name: *Cretolamna* sp.
Formation: Aquia Fm. Piscataway member
Locality: Smith's point, Potomac river near Liverpool PT., MD., USA
Age: Eocene
Illustrate: Plate 38(10386a,b)

No. 10387
Name: *Serratolamna serrata* (Agassiz)
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone ⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10388
Name: *Cretolamna* sp.
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Eocene
Illustrate: Plate 38

No. 10389
Name: *Cretolamna* sp.
Formation: unknown
Locality: Chercq, Belgium
Age: Eocene (Bruxellien)
Illustrate: Plate 38

No. 10390
Name: *Cretolamna* sp.
Formation: unknown
Locality: Medford, New Jersey, USA
Age: Eocene
Illustrate:

No. 10391
Name: *Cretolamna aschersoni* (Stromer)
Formation: unknown
Locality: Abandoned Trench at Entrance to Old Recette, Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 38

No. 10392
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10393
Name: *Cretolamna* sp.
Formation: Santon Pinniformis Schichten
Locality: Weiner Esch bei Ochtrup, Germany
Age: Upper Cretaceous
Illustrate:

No. 10394
Name: *Cretolamna aschersoni* (Stromer)
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene
Illustrate: Plate 38(10394a,b)

No. 10395
Name: *Cretolamna* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Palaeocene
Illustrate: Plate 38(10395a,b)

No. 10396
Name: *Cretolamna* sp.
Formation: unknown
Locality: South Carolina, USA
Age: Eocene
Illustrate:

No. 10397
Name: *Cretolamna* sp.
Formation: Peedee
Locality: Rosehill, Duplin county, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 38(10397a,b)

No. 10398
Name: *Cretolamna appendiculata* (Agassiz)
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate: Plate 38

No. 10399
Name: *Cretoxyrhina mantelli* (Agassiz)
Formation: Graneros Shale ?
Locality: Fairport, Kansas, USA
Age: Upper Cretaceous
Illustrate: Plate 38

No. 10400
Name: *Protolamna* sp.
Formation: Paw Paw Fm.
Locality: Few miles north of Denton, Texas, USA
Age: Lower Cretaceous (Upper Albian)
Illustrate:

No. 10401
Name: *Carcharocles* cf. *C. auriculatus* (Blainville)
Formation: unknown
Locality: Port Royal, South Carolina, USA
Age: Miocene
Illustrate: Plate 2(1),18

No. 10402
Name: *Carcharocles* sp.
Formation: unknown
Locality: Brickworks at Rumst, Belgium
Age: Miocene
Illustrate:

No. 10403
Name: *Carcharocles auriculatus* (Blainville)
Formation: Duplin Marl
Locality: Rosehill, North Carolina, USA
Age: Miocene (Tortonian)
Illustrate: Plate 39

No. 10404
Name: *Carcharocles* sp.
Formation: C2 Phosphate Bed Mid Globigerina Limestone.
Locality: Gnejna valley, Island of Malta
Age: Miocene
Illustrate: Plate 39

No. 10405
Name: *Carcharocles angustidens* (Agassiz)
Formation: unknown
Locality: Chattahoochie,Appalachicola & Flint River Confluence,Gadsden Co., Florida, USA
Age: Miocene
Illustrate: Plate 25(10405a,b)

No. 10406
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate:

No. 10407
Name: *Carcharocles megalodon* (Agassiz)
Formation: Shark tooth hill
Locality: Bakersfield, California, USA
Age: Middle Miocene (Helevetian)
Illustrate: Plate 19

No. 10408
Name: *Carcharocles* sp.
Formation: Vincentown fm.
Locality: Church & Eayrestown Rd., Medford, New Jersey, USA
Age: Eocene
Illustrate:

No. 10409
Name: *Carcharocles* sp.
Formation: unknown
Locality: Sankt Pankraz near Hanunsberg, Salzburg, Austria
Age: Eocene (Lutetian ?)
Illustrate: Plate 39

No. 10410
Name: *Carcharocles* sp.
Formation: Santee Marl
Locality: Harleyville, South Carolina, USA
Age: Eocene
Illustrate:

No. 10411
Name: *Carcharocles* sp.
Formation: Ocala L /S
Locality: Gainesville, Florida, USA
Age: Eocene
Illustrate:

No. 10412
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt. 17, GA., USA
Age: Miocene /Pliocene
Illustrate:

No. 10413
Name: *Carcharocles* sp.
Formation: unknown
Locality: Manganese Mine on the Island of Cuba
Age: Miocene ?
Illustrate:

No. 10414
Name: *Carcharocles* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate: Plate 39

No. 10415
Name: *Carcharocles* sp.
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate: Plate 39

No. 10416
Name: *Carcharocles megalodon* (Agassiz)
Formation: Hawthorne Fm.
Locality: Rt.41 at Boat yard off Wando River Bridge N.W. of Mt. Pleasant, South Carolina, USA
Age: Miocene
Illustrate:

No. 10417
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Daniel Island Dike in Charleston Harbor and Detyens Shipyard dredged fill at Cainhoy, South Carolina, USA
Age: Miocene
Illustrate:

No. 10418
Name: *Carcharocles* sp.
Formation: Hawthorne Fm. ?
Locality: Giant Portland Quarry, South Carolina, USA
Age: Miocene
Illustrate: Plate 39

No. 10419
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Savannah, Georgia, USA
Age: Miocene
Illustrate:

No. 10420
Name: *Carcharocles megalodon* (Agassiz)
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10421
Name: *Carcharocles* sp.
Formation: unknown
Locality: Newport Bay, California, USA
Age: Pliocene
Illustrate:

No. 10422
Name: *Carcharocles megalodon* (Agassiz)
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 19(10422a~h)

No. 10423
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Steendorp, Belgium
Age: Miocene
Illustrate: Plate 1(14,15),18(10423a,b)

No. 10424
Name: *Carcharocles* sp.
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate:

No. 10425
Name: *Carcharocles megalodon* (Agassiz)
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 39

No. 10426
Name: *Otodus obliquus* Agassiz
Formation: unknown
Locality: Shark River, New Jersey, USA
Age: Eocene
Illustrate:

No. 10427
Name: *Otodus obliquus* Agassiz
Formation: Manasquam Marl
Locality: Shark River, New Jersey, USA
Age: Eocene
Illustrate: Plate 39

No. 10428
Name: *Otodus obliquus* Agassiz
Formation: unknown
Locality: Suffolk, England, UK
Age: Eocene (Reworked Miocene)
Illustrate: Plate 39

No. 10429
Name: *Otodus obliquus* Agassiz
Formation: Peedee
Locality: Rosehill, North Carolina, USA
Age: Eocene
Illustrate:

No. 10430
Name: *Otodus obliquus* Agassiz
Formation: unknown
Locality: Crownsville, Maryland, USA
Age: Upper Middle Eocene
Illustrate:

No. 10431
Name: *Otodus* sp.
Formation: Vincentown Fm.
Locality: Church & Eayrestown Rd., Medford, New Jersey, USA
Age: Eocene
Illustrate:

No. 10432
Name: *Otodus obliquus* Agassiz
Formation: Aquia Fm.
Locality: Fairview Beach, Osso, Virginia, USA
Age: Eocene
Illustrate:

No. 10433
Name: *Otodus obliquus* Agassiz
Formation: unknown
Locality: Sidi-Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10434
Name: *Otodus obliquus* Agassiz
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate:

No. 10435
Name: *Alopias* cf. *A. vulpinus* (Bonnaterre)
Formation: Pungo River Marl Fm.
Locality: Lee Creek Mine, S. side of Pamilico River near Aurora, Beaufort Co., North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10436
Name: *Paranomotodon* sp.
Formation: Taylor Marl
Locality: N.Sulphur River, Ladonia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10437
Name: *Paranomotodon* sp. ?
Formation: unknown
Locality: Foum Tizi, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10438
Name: *Paranomotodon angustidens* (Reuss)
Formation: unknown
Locality: Irrigation Pond Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 39

No. 10439
Name: *Pseudocorax affinis* (Münster)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10440
Name: *Pseudocorax affinis* (Münster)
Formation: unknown
Locality: Eben, Robin-Thier, Belgium
Age: Upper Cretaceous (Upper Maastrichtian)
Illustrate: Plate 39(10440a,b)

No. 10441
Name: *Pseudocorax affinis* (Münster)
Formation: unknown
Locality: Eben-Robin-Thier, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10442
Name: *Pseudocorax* sp.
Formation: unknown
Locality: Obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10443
Name: *Pseudocorax laevis* (Leriche)
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10444
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Rt.35 Food town Circus, Middletown, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10445
Name: *Squalicorax* sp.
Formation: unknown
Locality: Senon Quedlinburg in Harz, Germany
Age: Upper Cretaceous (Senonian ?)
Illustrate:

No. 10446
Name: *Squalicorax kaupi* (Agassiz)
Formation: Peedie Fm.
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10447
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Morocco
Age: Cretaceous
Illustrate: Plate 40(10447a,b)

No. 10448
Name: *Squalicorax kaupi* (Agassiz)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 39

No. 10449
Name: *Squalicorax yangaensis* (Dartevelle & Casier)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 40(10449a,b)

No. 10450
Name: *Squalicorax falcatus* (Agassiz)
Formation: Niobrara
Locality: Russell, Kansas, USA
Age: Upper Cretaceous
Illustrate:

No. 10451
Name: *Squalicorax falcatus* (Agassiz)
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10452
Name: *Squalicorax falcatus* (Agassiz)
Formation: Chalk (Mucronata zone)
Locality: Norwich, Norfolk, England, UK
Age: Upper Cretaceous
Illustrate:

No. 10453
Name: *Squalicorax falcatus* (Agassiz)
Formation: unknown
Locality: Strehlen Bei Dresden, Germany
Age: Upper Cretaceous (Turonian)
Illustrate:

No. 10454
Name: *Squalicorax falcatus* (Agassiz)
Formation: Niobrara Chalk Fm.
Locality: Monument, Kansas, USA
Age: Upper Cretaceous
Illustrate: Plate 39(10454a,b)

No. 10455
Name: *Squalicorax kaupi* (Agassiz)
Formation: Tinton Falls Fm.
Locality: Tinton Falls, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10456
Name: *Squalicorax kaupi* (Agassiz)
Formation: Navesink (Derived)
Locality: Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 39

No. 10457
Name: *Squalicorax kaupi* (Agassiz)
Formation: Navesink (Derived)
Locality: Hop Brook, Holmdel, New Jersey, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 39

No. 10458
Name: *Squalicorax kaupi* (Agassiz)
Formation: Mt.Laurel Sands
Locality: Hop Brook,Harding Farm, Holmdel, New Jersey, USA
Age: Upper Cretaceous (Late Campanian)
Illustrate:

No. 10459
Name: *Squalicorax kaupi* (Agassiz)
Formation: Navesink Fm.
Locality: Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 39

No. 10460
Name: *Squalicorax kaupi* (Agassiz)
Formation: Mt.Laurel Sands (Fm.)
Locality: Hop Brook, Harding Farm, Holmdel, New Jersey, USA
Age: Upper Cretaceous (Late Campanian)
Illustrate:

No. 10461
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Navesink Fm.
Locality: Holmdel, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 40

No. 10462
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Taylor Marl
Locality: N.Sulphur River, Ladonia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 40

No. 10463
Name: *Squalicorax kaupi* (Agassiz)
Formation: Taylor Marl
Locality: N.Sulphur River, Ladonia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39(10463a,b)

No. 10464
Name: *Squalicorax* sp. (Vertebral centrum)
Formation: Niobara Chalk Fm.
Locality: 2 mi. N. of Elkader, Kansas, USA
Age: Upper Cretaceous
Illustrate:

No. 10465
Name: *Squalicorax pristodontus* (Agassiz) and others
Formation: Quadrata Zone
Locality: Chalk Pit Pakdown Hill near Fareham Hants, England, UK
Age: Upper Cretaceous (Senonian)
Illustrate: Plate 40(10465a,b)

No. 10466
Name: *Squalicorax* sp.
Formation: unknown
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10467
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 40

No. 10468
Name: *Squalicorax kaupi* (Agassiz)
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain, Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate:

No. 10469
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 40

No. 10470
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: 13 km so. from Khouribga on the road to Fikh-Ben-Salah, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate:

No. 10471
Name: *Squalicorax falcatus* (Agassiz)
Formation: Niobrara Fm. Tempas Member Limestone
Locality: Morrison, Colorado, USA
Age: Upper Cretaceous
Illustrate:

No. 10472
Name: *Squalicorax kaupi* (Agassiz)
Formation: unknown
Locality: Foum Tizi, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 39

No. 10473
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Foum Tizi, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10474
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Eben-Emael, Belgium
Age: Upper Cretaceous
Illustrate: Plate 40

No. 10475
Name: *Squalicorax kaupi* (Agassiz)
Formation: unknown
Locality: Obourg, Belgium
Age: Upper Cretaceous
Illustrate:

No. 10476
Name: *Squalicorax kaupi* (Agassiz)
Formation: unknown
Locality: Irrigation Pond, Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate:

No. 10477
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Irrigation Pond, Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 40

No. 10478
Name: *Squalicorax kaupi* (Agassiz)
Formation: Taylor Marl Fm. (Brownstown Marl ?)
Locality: Bell Co., Sparks, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10479
Name: *Squalicorax falcatus* (Agassiz)
Formation: South Basque Fm. (Eagle Ford Shale)
Locality: McGregor, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10480
Name: *Squalicorax falcatus* (Agassiz)
Formation: Green Horn Limestone Fm.
Locality: West of Newcastle, Eastern Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10481
Name: *Squalicorax falcatus* (Agassiz)
Formation: Eagle Foul Shale
Locality: At Arcadia park & Cockerell Hill Rd. Dallas County, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10482
Name: *Squalicorax kaupi* (Agassiz)
Formation: Tombigbee Sand Member, Eutaw Fm.
Locality: Barton's Bluff, West Point, Mississippi, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10483
Name: *Squalicorax falcatus* (Agassiz)
Formation: Dakota Fm. ?
Locality: Rooney's Gulch, Colorado, USA
Age: Upper Cretaceous
Illustrate:

No. 10484
Name: *Squalicorax pristodontus* (Agassiz)
Formation: Austin Chalk ?
Locality: Seagoville, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10485
Name: *Squalicorax falcatus* (Agassiz)
Formation: Eagle Ford Shale
Locality: Austin, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10486
Name: *Squalicorax falcatus* (Agassiz)
Formation: Austin Chalk or Eagle Ford Shale.
Locality: On Edge of Lake Texhoma, S.W. of Pottsboro, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10487
Name: *Squalicorax pristodontus* (Agasiz)
Formation: Navesink Fm. ?
Locality: Shipley Farm, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate:

No. 10488
Name: *Squalicorax falcatus* (Agassiz)
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10489
Name: *Squalicorax falcatus* (Agassiz)
Formation: Carlisle Shale
Locality: Rawlins, Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10490
Name: *Squalicorax falcatus* (Agassiz)
Formation: Graneros Shale ?
Locality: Fairport, Kansas, USA
Age: Upper Cretaceous
Illustrate:

No. 10491
Name: *Squalicorax* sp.
Formation: Essener Greensand
Locality: Muhlheim, Germany
Age: Upper Cretaceous (Cenomanian)
Illustrate:

No. 10492
Name: *Squalicorax falcatus* (Agassiz)
Formation: Frontier Fm. (Carlile Shale)
Locality: Nowl, Wyoming, USA
Age: Upper Cretaceous
Illustrate:

No. 10493
Name: *Squalicorax falcatus* (Agassiz)
Formation: Duck Creek Limestone Fm.
Locality: Crayson County, Texas, USA
Age: Upper Cretaceous
Illustrate:

No. 10494
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10495
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Tranchee R.E.I.,Sidi Daoui, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10496
Name: *Squalicorax pristodontus* (Agassiz)
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous
Illustrate:

No. 10497
Name: *Squalicorax falcatus* (Agassiz)
Formation: Carlisle Shale
Locality: Edgemont, South Dakota, USA
Age: Upper Cretaceous
Illustrate:

No. 10498
Name: *Squalicorax falcatus* (Agassiz)
Formation: Carlile Shale
Locality: Weston County, Upton, Wyoming, USA
Age: Cretaceous
Illustrate:

No. 10499
Name: *Squalicorax* sp.
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone ⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 40

No. 10500
Name: *Squalicorax* sp.
Formation: Waccamaw Fm.
Locality: Surrat (Dunn) Farm, Shallow, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10501
Name: *Squalicorax* sp.
Formation: Santon Pinniformis Schichten
Locality: Weiner Esch bei Ochtrup, Germany
Age: Upper Cretaceous
Illustrate:

No. 10502
Name: *Squalicorax* sp.
Formation: unknown
Locality: Hardivillers, France
Age: Upper Cretaceous
Illustrate:

No. 10503
Name: *Squalicorax kaupi* (Agassiz)
Formation: Merchantville ? or Woodbury Clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 39

No. 10504
Name: *Squalicorax kaupi* (Agassiz)
Formation: Navesink (derived)
Locality: Tributary Parallel to Ramanesson Brook opposite the Old Mill & waterfall in the Big Meadow on Harding Property (Hop Brook), New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10505
Name: *Squalicorax falcatus* (Agassiz)
Formation: unknown
Locality: Mt.Lake road Kamp Ranch, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 39(10505a,b)

No. 10506
Name: *Squalicorax kaupi* (Agassiz)
Formation: Matawan Woodbury Clay
Locality: Matawan, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10507
Name: *Scyliorhinus brivesi* Arambourg
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Palaeocene (Montian)
Illustrate:

No. 10508
Name: *Scyliorhinus africanus* Arambourg
Formation: unknown
Locality: Oued Zem, Morocco
Age: Early Eocene
Illustrate:

No. 10509
Name: *Scyliorhinus subulidens* Arambourg
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10510
Name: *Scyliorhinus* sp.
Formation: unknown
Locality: England, UK
Age: Eocene
Illustrate:

No. 10511
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Pryor, Montana, USA (Indian reservation)
Age: Paleocene
Illustrate:

No. 10512
Name: *Galeorhinus minutissimus* Arambourg
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10513
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Infencin De Foret, Belgium
Age: Eocene
Illustrate:

No. 10514
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10515
Name: *Galeorhinus* sp.
Formation: unknown
Locality: khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10516
Name: *Galeorhinus* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate:

No. 10517
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Foret Des Bruxelles, Belgium
Age: Eocene (Ypresian)
Illustrate:

No. 10518
Name: *Galeorhinus* sp.
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate:

No. 10519
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 40(10519a,b)

No. 10520
Name: *Hemipristis serra* Agassiz
Formation: C2 Phosphate Bed Mid Globigerina Limestone.
Locality: Gnejna valley, Island of Malta
Age: Miocene
Illustrate: Plate 40

No. 10521
Name: *Hemipristis* sp.
Formation: Peedee
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Eocene
Illustrate:

No. 10522
Name: *Hemipristis serra* Agassiz
Formation: Calvert Fm.
Locality: Horsehead Cliffs, Potomac River, Wakefield, Virginia, USA
Age: Middle Miocene
Illustrate: Plate 40

No. 10523
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 40

No. 10524
Name: *Hemipristis serra* Agassiz
Formation: Santa Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate:

No. 10525
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt. 17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 40

No. 10526
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate:

No. 10527
Name: *Hemipristis serra* Agassiz
Formation: Hawthorne Fm. ?
Locality: Edisto Beach, South Carolina, USA
Age: Miocene
Illustrate:

No. 10528
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate: Plate 40(10528a,b)

No. 10529
Name: *Hemipristis* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate:

No. 10530
Name: *Hemipristis serra* Agassiz
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate: Plate 40(10530a,b)

No. 10531
Name: *Hemipristis serra* Agassiz
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate:

No. 10532
Name: *Hemipristis serra* Agassiz
Formation: Hawthorne Fm.
Locality: Rt.41 at Boat yard off Wando River Bridge N.W. of Mt. Pleasant, South Carolina, USA
Age: Miocene
Illustrate:

No. 10533
Name: *Hemipristis serra* Agassiz
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 40

No. 10534
Name: *Abdounia minutissima* (Winkler)
Formation: Tuscahoma Fm.
Locality: Meridian, Mississippi, USA
Age: Early Eocene (Ypresian)
Illustrate:

No. 10535
Name: *Abdounia* sp.
Formation: unknown
Locality: Metlaoui, Tunisia
Age: Eocene (Ypresian)
Illustrate:

No. 10536
Name: *Abdounia* sp.
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10537
Name: *Abdounia* sp.
Formation: unknown
Locality: khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10538
Name: *Abdounia* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10539
Name: *Abdounia* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate:

No. 10540
Name: *Abdounia* sp.
Formation: unknown
Locality: Foret Des Bruxelles, Belgium
Age: Eocene (Ypresian)
Illustrate:

No. 10541
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Port Royal, South Carolina, USA
Age: Miocene
Illustrate: Plate 40(10541a,b)

No. 10542
Name: *Carcharhinus* sp.
Formation: Modello
Locality: "Leisure World" housing project, El Toro, California, USA
Age: Miocene
Illustrate:

No. 10543
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Talum d'Orthey,Lower Pyriennes,France
Age: Miocene
Illustrate: Plate 40(10543a,b)

No. 10544
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 40

No. 10545
Name: *Carcharhinus* sp.
Formation: Sant Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 40

No. 10546
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Ashley River, Charleston, South Carolina. USA
Age: Middle Miocene (Burdigalian)
Illustrate:

No. 10547
Name: *Carcharhinus* sp.
Formation: Calvert Fm.
Locality: Nomini Cliffs, on the Potomac River, Virginia, USA
Age: Middle Miocene
Illustrate: Plate 40

No. 10548
Name: *Carcharhinus* sp.
Formation: Shark River Marl
Locality: Shark River, Neptune, New Jersey, USA
Age: Eocene
Illustrate:

No. 10549
Name: *Carcharhinus* sp.
Formation: Clinchfield Sand, Claiborne Group.
Locality: Quarry, Clinchfield, Georgia, USA
Age: Middle Eocene
Illustrate:

No. 10550
Name: *Carcharhinus* sp.
Formation: Cooper Marl (Jackson Group).
Locality: Hawkinsville, Georgia, USA
Age: Upper Eocene - Lower Oligocene
Illustrate:

No. 10551
Name: *Carcharhinus* sp.
Formation: Clinchfield Sands.
Locality: Georgia, USA
Age: Late Eocene
Illustrate:

No. 10552
Name: *Carcharhinus* sp.
Formation: Red Crag Bed.
Locality: Suffolk, England, UK
Age: Eocene
Illustrate:

No. 10553
Name: *Carcharhinus* sp.
Formation: Santee Marl
Locality: Harleyville, South Carolina, USA
Age: Eocene
Illustrate:

No. 10554
Name: *Carcharhinus* sp.
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier Brige off of Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 40(10554a,b)

No. 10555
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate: Plate 40(10555a,b)

No. 10556
Name: *Carcharhinus* sp.
Formation: Calvert Fm.
Locality: Potomac River, Charles County, Maryland, USA
Age: Miocene
Illustrate:

No. 10557
Name: *Carcharhinus* sp.
Formation: Hawthorne Fm. ?
Locality: Edisto Beach, South Carolina, USA
Age: Miocene
Illustrate: Plate 40

No. 10558
Name: *Carcharhinus* sp.
Formation: Hawthorne Fm.
Locality: Murrell's inlet, Garden city, South Carolina, USA
Age: Miocene
Illustrate:

No. 10559
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate: Plate 40(10559a,b)

No. 10560
Name: *Carcharhinus* sp.
Formation: Temblor Fm.
Locality: Poso Creek, Kern Co., California, USA
Age: Miocene
Illustrate:

No. 10561
Name: *Carcharhinus* sp.
Formation: Temblor Fm.
Locality: Cuyama, California, USA
Age: Miocene
Illustrate:

No. 10562
Name: *Carcharhinus* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate:

No. 10563
Name: *Carcharhinus* sp.
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate: Plate 40(10563a,b)

No. 10564
Name: *Carcharhinus* sp.
Formation: Hawthorne Fm.
Locality: Rt.41 at Boat yard off Wando River Bridge N.W. of Mt. Pleasant, South Carolina, USA
Age: Miocene
Illustrate:

No. 10565
Name: *Carcharhinus* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate:

No. 10566
Name: *Carcharhinus* sp.
Formation: Hawthorne(?)
Locality: White shell channel cut-dredgings, Jacksonville, Florida, USA
Age: Miocene
Illustrate: Plate 40(10566a,b)

No. 10567
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Melkbos, Cape Province, South Africa
Age: Miocene
Illustrate: Plate 41(10567a,b)

No. 10568
Name: *Carcharhinus* sp.
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41(10568a,b)

No. 10569
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Bevery Beach, Oregon, USA
Age: Miocene
Illustrate: Plate 41(10569a,b)

No. 10570
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Newport bay, California, USA
Age: Pliocene
Illustrate:

No. 10571
Name: *Carcharhinus* sp.
Formation: Pungo River Marl Fm.
Locality: Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41(10571a,b)

No. 10572
Name: *Carcharhinus* sp.
Formation: Pungo River Marl Fm.
Locality: Lee Creek Mine, S. of Pomlico River near Aurora,Beautfort Co., North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10573
Name: *Carcharhinus* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10574
Name: *Carcharhinus priscus* (Agassiz)
Formation: Pungo River Marl Fm.
Locality: T.G.S., Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 40(10574a～d)

No. 10575
Name: *Carcharhinus* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10576
Name: *Carcharhinus* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Lee Creek, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41

No. 10577
Name: *Carcharhinus* sp.
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 41(10577a,b)

No. 10578
Name: *Carcharhinus* sp.
Formation: unknown
Locality: South Carolina, USA
Age: Eocene
Illustrate:

No. 10579
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41(10579a,b)

No. 10580
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41(10580a~c)

No. 10581
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41(10581a,b)

No. 10582
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41

No. 10583
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate:

No. 10584
Name: *Carcharhinus* sp.
Formation: unknown
Locality: Savannah, Georgia, USA
Age: Miocene
Illustrate: Plate 41(10584a,b)

No. 10585
Name: *Palaeohypotodus* sp.
Formation: unknown
Locality: 3 miles near Malvern, Hot Springs Co., Arkansas, USA
Age: Eocene
Illustrate: Plate 30

No. 10586
Name: *Galeocerdo contortus* Gibbes
Formation: unknown
Locality: Port Royal, South Carolina, USA
Age: Miocene
Illustrate: Plate 41

No. 10587
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate: Plate 41

No. 10588
Name: *Galeocerdo* sp.
Formation: Castle Hayne Fm.
Locality: Rosehill, North Carolina, USA
Age: Eocene (Ypresian ?)
Illustrate:

No. 10589
Name: *Galeocerdo latidens* Agassiz
Formation: unknown
Locality: Subway Construction site, Brussels, Belgium
Age: Early Eocene (Lutetian)
Illustrate: Plate 41

No. 10590
Name: *Galeocerdo* sp.
Formation: Peedee
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Eocene
Illustrate:

No. 10591
Name: *Galeocerdo contortus* Gibbes
Formation: Calvert Fm.
Locality: Westmoreland State Park on the Potomac River, Virginia, USA
Age: Middle Miocene
Illustrate: Plate 41

No. 10592
Name: *Galeocerdo contortus* Gibbes
Formation: unknown
Locality: Ashley River, Charleston, South Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10593
Name: *Galeocerdo aduncas* Agassiz
Formation: unknown
Locality: Ashley River, Charleston, South Carolina. USA
Age: Middle Miocene (Burdigalian)
Illustrate:

No. 10594
Name: *Galeocerdo aduncas* Agassiz
Formation: Calvert Fm.
Locality: Horsehead Cliffs, Potomac River, Wakefield, Virginia, USA
Age: Middle Miocene
Illustrate: Plate 41

No. 10595
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 41

No. 10596
Name: *Galeocerdo contortus* Gibbes
Formation: Santa Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate: Plate 41

No. 10597
Name: *Galeocerdo aduncas* Agassiz
Formation: Pungo River Fm.
Locality: Lee Creek,Aurora,North Carolina,USA
Age: Miocene
Illustrate: Plate 41(10597a,b)

No. 10598
Name: *Galeocerdo contortus* Gibbes
Formation: Pungo River Fm.
Locality: Lee Creek,Aurora,North Carolina,USA
Age: Miocene
Illustrate: Plate 41(10598a,b)

No. 10599
Name: *Galeocerdo* sp.
Formation: Clinchfield sand, Claiborne Group.
Locality: Quarry, Clinchfield, Georgia, USA
Age: Middle Eocene
Illustrate:

No. 10600
Name: *Galeocerdo aduncas* Agassiz
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Eocene
Illustrate:

No. 10601
Name: *Galeocerdo* sp.
Formation: unknown
Locality: Chercq, Belgium
Age: Eocene (Bruxellian)
Illustrate:

No. 10602
Name: *Galeocerdo* sp.
Formation: Clinchfield Sands
Locality: Georgia, USA
Age: Late Eocene
Illustrate:

No. 10603
Name: *Galeocerdo* sp.
Formation: Santee Marl
Locality: Harleyville, South Carolina, USA
Age: Eocene
Illustrate:

No. 10604
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 41

No. 10605
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: unknown
Locality: I-95 Construction at White Oak, Camden Co., off Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 27(10605a~o)

No. 10606
Name: *Galeocerdo contortus* Gibbes
Formation: Calvert Fm.
Locality: Potomac River, Charles County, Maryland, USA
Age: Miocene
Illustrate:

No. 10607
Name: *Galeocerdo aduncas* Agassiz
Formation: Calvert Fm.
Locality: Potomac River, Charles County, Maryland, USA
Age: Miocene
Illustrate: Plate 41

No. 10608
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: Hawthorne Fm. ?
Locality: Edisto Beach, South Carolina, USA
Age: Miocene
Illustrate:

No. 10609
Name: *Galeocerdo aduncas* Agassiz
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate:

No. 10610
Name: *Galeocerdo contortus* Gibbes
Formation: Vascos Fm.
Locality: Scotts Valley, California, USA
Age: Miocene
Illustrate: Plate 41

No. 10611
Name: *Galeocerdo* sp.
Formation: Temblor Fm.
Locality: Poso Creek, Kern Co., California, USA
Age: Miocene
Illustrate: Plate 41(10611a,b)

No. 10612
Name: *Galeocerdo* sp.
Formation: Temblor Fm.
Locality: Cuyama, California, USA
Age: Miocene
Illustrate:

No. 10613
Name: *Galeocerdo* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate: Plate 41

No. 10614
Name: *Galeocerdo* sp.
Formation: Hawthorne Fm.
Locality: Rt.41 at Boat yard off Wando River Bridge N.W. of Mt. Pleasant, South Carolina, USA
Age: Miocene
Illustrate:

No. 10615
Name: *Galeocerdo* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate:

No. 10616
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41(10616a,b)

No. 10617
Name: *Galeocerdo aduncas* Agassiz
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10618
Name: *Galeocerdo contortus* Gibbes
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10619
Name: *Galeocerdo aduncas* Agassiz
Formation: unknown
Locality: Boom, Belgium
Age: Pliocene
Illustrate: Plate 41

No. 10620
Name: *Galeocerdo contortus* Gibbes
Formation: Pungo River Marl Fm.
Locality: Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41(10620a,b)

No. 10621
Name: *Galeocerdo aduncas* Agassiz
Formation: Pungo River Marl Fm.
Locality: Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41(10621a,b)

No. 10622
Name: *Caleocerdo oontortus* Gibbes (Parasymphyseal tooth ?)
Formation: Pungo River Marl Fm.
Locality: Lee Creek Mine, S. of Pamlico River near Aurora,Beautfort Co., North Carolina, USA
Age: unknown
Illustrate: Plate 41(10622a,b)

No. 10623
Name: *Gareocerdo contortus* Gibbes
Formation: Pungo River Marl Fm.
Locality: T.G.S., Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate:

No. 10624
Name: *Galeocerdo* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Lee Creek, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41

No. 10625
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate:

No. 10626
Name: *Galeocerdo* sp.
Formation: unknown
Locality: South Carolina, USA
Age: Eocene
Illustrate:

No. 10627
Name: *Galeocerdo cuvieri* (Peron & Lesueur)
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41

No. 10628
Name: *Galeocerdo* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate:

No. 10629
Name: *Galeocerdo* sp.
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate:

No. 10630
Name: *Negaprion* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 26(10630a~f),27(10630a~l)

No. 10631
Name: *Negaprion* sp. (Lemon shark)
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 41(10631a,b)

No. 10632
Name: *Pterolamiops* sp.
Formation: unknown
Locality: I-95 Construction at White Oak, Camden Co., off Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 41

No. 10633
Name: *Pterolamiops longimanus* (Poey)
Formation: Hawthorne(?)
Locality: White shell channel cut-dredgings, Jacksonville, Florida, USA
Age: Miocene
Illustrate: Plate 41

No. 10634
Name: *Pterolamiops* sp.
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 41

No. 10635
Name: *Pterolamiops longimanus* (Poey)
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 41

No. 10636
Name: *Pterolamiops longimanus* (Poey)
Formation: unknown
Locality: Port Royal, South Carolina, USA
Age: Miocene
Illustrate: Plate 41

No. 10637
Name: *Synechodus* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate: Plate 41

No. 10638
Name: *Synechodus* sp.
Formation: unknown
Locality: Craie D'obourg, Belgium
Age: Upper Cretaceous
Illustrate: Plate 41

No. 10639
Name: *Myledaphus bipartitus* Cope
Formation: Edmonton Fm.
Locality: Munson Ferry, near Drumheller, Alberta, Canada
Age: Upper Cretaceous
Illustrate: Plate 41(10639a,b)

No. 10640
Name: *Sphyrna* sp.
Formation: Temblor Fm.
Locality: Poso Creek, Kern Co., California, USA
Age: Miocene
Illustrate: Plate 41(10640a,b)

No. 10641
Name: *Protoplatyrhina renae* Case (Dermal Denticles)
Formation: Mesaverde Fm.
Locality: Worland, Wyoming, USA
Age: Upper Cretaceous (Late Campanian)
Illustrate:

No. 10642
Name: *Raja dux* Cope (skate dermal ossicles)
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 39

No. 10643
Name: *Raja* sp.
Formation: unknown
Locality: Kallo, Belgium
Age: Miocene or Pliocene
Illustrate: Plate 42

No. 10644
Name: *Raja clavata* Agassiz
Formation: Red Crag
Locality: Suffolk, England, UK
Age: Pliocene
Illustrate: Plate 4(6),42

No. 10645
Name: *Raja dux* Cope (Dermal denticle of ray)
Formation: Hawthorne(?)
Locality: White shell channel cut-dredgings, Jacksonville, Florida, USA
Age: Miocene
Illustrate:

No. 10646
Name: *Raja dux* Cope (Dermal denticles)
Formation: Pungo River Marl Fm.
Locality: T.G.S. North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 4(4,8),42(10646a,b)

No. 10647
Name: *Raja dux* Cope (Dermal denticles)
Formation: Pungo River Marl Fm.
Locality: T.G.S. North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 42(10647a,b)

No. 10648
Name: *Raja antiqua* Agassiz (Osseous scute)
Formation: unknown
Locality: Red Crag. Suffolk, England, UK
Age: Eocene
Illustrate: Plate 4(9,10),42(10648a,b)

No. 10649
Name: *Pseudohypolophus mcnultyi* (Thurmond)
Formation: Uppermost Woodbine Fm.
Locality: Tarrant Co., Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 41

No. 10650
Name: *Ischyrhiza mira* Leidy
Formation: Taylor Marl
Locality: N.Shlphur River, Ladoniia, Texas, USA
Age: Upper Cretaceous
Illustrate: Plate 42(10650a,b)

No. 10651
Name: *Ischyrhiza mira* Leidy
Formation: unknown
Locality: Freehold, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 42

No. 10652
Name: *Ischyrhiza mira* Leidy
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 42(10652a,b)

No. 10653
Name: *Ischyrhiza mira* Leidy
Formation: Matawan Woodbury Clay
Locality: Matawan, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 42

No. 10654
Name: *Ischyrhiza mira* Leidy
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate: Plate 42(10654a,b)

No. 10655
Name: *Ischyrhiza mira* Leidy
Formation: Navesink - Mt. Laurel
Locality: C & D Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate: Plate 42

No. 10656
Name: *Anoxypristis* sp.
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 29(10656a~j)

No. 10657
Name: *Anoxypristis* sp.
Formation: unknown
Locality: Tranchée R.E.I., Sidi-Daoui, Morocco
Age: Eocene (Thanetian-Ypresian)
Illustrate: Plate 42

No. 10658
Name: *Pristis* sp.
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10659
Name: *Pristis lathami* Galeotti (Sawfish rostral spine)
Formation: unknown
Locality: Sidi-Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 42

No. 10660
Name: *Pristis* sp.
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate:

No. 10661
Name: *Pristis* sp.
Formation: unknown
Locality: Balagem, Belgium
Age: Miocene
Illustrate:

No. 10662
Name: *Pristis* sp.
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate: Plate 42(10662a,b)

No. 10663
Name: *Pristis* sp.
Formation: Kirkwood
Locality: Shark river, Neptune, New Jersey, USA
Age: Miocene
Illustrate:

No. 10664
Name: *Pristis* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate 42(10664a~c)

No. 10665
Name: *Pristis* sp.
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate:

No. 10666
Name: *Pristis* sp.
Formation: unknown
Locality: Port Royal, Suoth Carolina, USA
Age: Miocene
Illustrate:

No. 10667
Name: *Pristis* sp. (vertebra)
Formation: unknown
Locality: L.Headons, Hordle Cliff, Taddiford, England, UK
Age: Upper Cretaceous
Illustrate:

No. 10668
Name: *Dasyatis* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Palaeocene (Montian)
Illustrate:

No. 10669
Name: *Dasyatis* sp. ?
Formation: Muddy Sandstone
Locality: Big Horn Basin, Wyoming, USA
Age: Lower Cretaceous (Middle Albian)
Illustrate:

No. 10670
Name: *Dasyatis* sp.
Formation: unknown
Locality: Hemixen, Belgium
Age: Miocene (Anversien)
Illustrate:

No. 10671
Name: *Aetobatus irregularis* (Agassiz)
Formation: Barton Clay
Locality: Barton on sea, Hants, England, UK
Age: Eocene
Illustrate: Plate 42

No. 10672
Name: *Aetobatus* sp.
Formation: unknown
Locality: France
Age: Miocene
Illustrate: Plate 4(5),42

No. 10673
Name: *Aetobatus irregularis* (Agassiz)
Formation: unknown
Locality: Isle of Sheppey, England, UK
Age: Eocene
Illustrate: Plate 29

No. 10674
Name: *Aetobatus irregulatus* (Agassiz)
Formation: unknown
Locality: Suffolk, England, UK
Age: Eocene
Illustrate: Plate 29

No. 10675
Name: *Brachyrhizodus wichitaensis* Romer (vertebrae)
Formation: unknown
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate: Plate 42(10675a,b)

No. 10676
Name: *Brachyrhizodus wichitaensis* Romer
Formation: Navesink (derived)
Locality: Dug out of Ancient River Channel in Flood Plain,Big Brook, Marlboro, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 42(10667a,b)

No. 10677
Name: *Brachyrhizodus wichitaensis* Romer
Formation: unknown
Locality: Irrigation Pond Buttonwood Farm, near Marlboro, at Herbert's Corner, off Rt.520,Bradevelt, New Jersey, USA
Age: Upper Cretaceous (Middle Maastrichtian)
Illustrate: Plate 42(10677a,b)

No. 10678
Name: *Brachyrhizodus wichitaensis* Romer
Formation: Merchantville ? or Woodbury clay.
Locality: Chesapeake & Delaware Canal, St.Georges, Delaware, USA
Age: Upper Cretaceous
Illustrate:

No. 10679
Name: *Brachyrhizodus wichitaensis* Romer (vertebral centrum)
Formation: Peedee
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 42

No. 10680
Name: *Brachyrhizodus wichitaensis* Romer
Formation: unknown
Locality: Spoil Banks, C & D, Canal, St.Georges, Delaware, USA
Age: Miocene
Illustrate: Plate 42

No. 10681
Name: *Brachyrhizodus wichitaensis* Romer
Formation: Navesink Fm.
Locality: Hop Brook, Holmdel, New Jersey, USA
Age: Upper Cretaceous
Illustrate: Plate 42(10681a,b)

No. 10682
Name: *Myliobatis toliapicus* Agassiz
Formation: unknown
Locality: Vlierzele, Belgium
Age: Eocene (Ledian)
Illustrate:

No. 10683
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 4(2),43

No. 10684
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi-Doaui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 4(3),43

No. 10685
Name: *Myliobatis toliapicus* Agassiz
Formation: Barton Beds
Locality: Bracklesham Bay, England, UK
Age: Eocene
Illustrate:

No. 10686
Name: *Myliobatis* sp.
Formation: unknown
Locality: Crownsville, Maryland, USA
Age: Upper Middle Eocene
Illustrate:

No. 10687
Name: *Myliobatis toliapicus* Agassiz
Formation: London Clay
Locality: Sheppey, England, UK
Age:
Illustrate:

No. 10688
Name: *Myliobatis* sp.
Formation: unknown
Locality: Kings Bay, Georgia, USA
Age: Miocene
Illustrate: Plate 4(12),43

No. 10689
Name: *Myliobatis* sp.
Formation: Pungo River Fm.
Locality: Aurora(Lee Creek), North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 4(11),43(10689a,b)

No. 10690
Name: *Myliobatis* sp.
Formation: unknown
Locality: Belgium
Age: Eocene (Lutetian ?)
Illustrate:

No. 10691
Name: *Myliobatis* sp.
Formation: Sant Margarita Fm.
Locality: Templeton, California, USA
Age: Miocene
Illustrate:

No. 10692
Name: *Myliobatis* sp.
Formation: unknown
Locality: Metlaoui, Tunisia
Age: Eocene (Ypresian)
Illustrate: Plate 43

No. 10693
Name: *Myliobatis* sp.
Formation: unknown
Locality: Merah-El-Arech, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10694
Name: *Myliobatis* sp.
Formation: Vincentown Fm.
Locality: Church & Eayrestown Rd., Medford, New Jersey, USA
Age: Eocene
Illustrate:

No. 10695
Name: *Myliobatis* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate:

No. 10696
Name: *Myliobatis* sp.
Formation: Aquia Fm. Piscataway member.
Locality: Smith's point, Potomac river near Liverpool PT., MD., USA
Age: Eocene
Illustrate: Plate 43(10696a~c)

No. 10697
Name: *Myliobatis* sp.
Formation: unknown
Locality: 3 miles near Malvern, Hot Springs Co., Arkansas, USA
Age: Eocene
Illustrate: Plate 43(10697a,b)

No. 10698
Name: *Myliobatis* sp.
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone Quarry, ⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Eocene
Illustrate:

No. 10699
Name: *Myliobatis* sp.
Formation: Aquia Fm.
Locality: Aquia Creek & Belvidere Beach, Virginia, USA
Age: Early Eocene
Illustrate: Plate 4(7),43(10699a,b)

No. 10700
Name: *Myliobatis* sp.
Formation: Cooper Marl (Jackson Group)
Locality: Hawkinsville, Georgia, USA
Age: Upper Eocene - Lower Oligocene
Illustrate:

No. 10701
Name: *Myliobatis* sp.
Formation: Barton Beds
Locality: Barton, Sussex, England, UK
Age: Eocene
Illustrate:

No. 10702
Name: *Myliobatis* sp.
Formation: unknown
Locality: Subway Construction site Brussells, Belgium
Age: Eocene (Lutetian)
Illustrate: Plate 44(10702a,b)

No. 10703
Name: *Myliobatis* sp.
Formation: unknown
Locality: Foret Des Bruxelles, Belgium
Age: Eocene (Ypresian)
Illustrate:

No. 10704
Name: *Myliobatis* sp.
Formation: Clinchfield Sands
Locality: Georgia, USA
Age: Late Eocene
Illustrate:

No. 10705
Name: *Myliobatis* sp.
Formation: Red Crag Bed
Locality: Suffolk, England, UK
Age: Eocene
Illustrate:

No. 10706
Name: *Myliobatis* sp.
Formation: Bracklesham Beds
Locality: Bracklesham Bay, England, UK
Age: Eocene
Illustrate: Plate 44(10706a,b)

No. 10707
Name: *Myliobatis* sp.
Formation: unknown
Locality: Pick County, Alabama, USA
Age: Palaeocene
Illustrate:

No. 10708
Name: *Myliobatis* sp.
Formation: unknown
Locality: Abandoned Trench at Entrance to Old Recette, Oued-Zem, Morocco
Age: Eocene (Ypresian)
Illustrate:

No. 10709
Name: *Myliobatis* sp.
Formation: unknown
Locality: Coal pit of Espenhain near Leipzig, Germany
Age: Oligocene
Illustrate:

No. 10710
Name: *Myliobatis* sp.
Formation: unknown
Locality: "A"Bank of Brunswick River,Glynn Co., near Sydney Lanier, Brige off of Rt.17, GA., USA
Age: Miocene /Pliocene
Illustrate: Plate 44(10710a,b)

No. 10711
Name: *Myliobatis* sp.
Formation: unknown
Locality: Charlie Creek, 2 mi. N of Garner, Florida, USA
Age: Miocene
Illustrate: Plate 44(10711a,b)

No. 10712
Name: *Myliobatis* sp.
Formation: unknown
Locality: Minnesott Beach, near Arapahoe Beach, North Carolina, USA
Age: Miocene
Illustrate: Plate 44

No. 10713
Name: *Myliobatis* sp.
Formation: Kirkwood Fm.
Locality: Mingamahone Brook near Camp Houseman, Hurley Pond Rd. & Rts. 524-547 Farmingdale, New Jersey, USA
Age: Miocene
Illustrate:

No. 10714
Name: *Myliobatis* sp.
Formation: Temblor Fm.
Locality: Poso Creek near Woody, California, USA
Age: Miocene
Illustrate:

No. 10715
Name: *Myliobatis* sp.
Formation: Monterey Fm. ?
Locality: Camp Drake near Lake Cachuma, California, USA
Age: Miocene
Illustrate:

No. 10716
Name: *Myliobatis* sp.
Formation: Hawthorne(?)
Locality: Jacksonville, Florida, USA
White shell channel cut-dredgings.
Age: Miocene
Illustrate:

No. 10717
Name: *Myliobatis* sp.
Formation: unknown
Locality: Melkbos, Cape Province South Africa
Age: Miocene
Illustrate:

No. 10718
Name: *Myliobatis* sp.
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 44

No. 10719
Name: *Myliobatis* sp.
Formation: unknown
Locality: Sidi-Daoui, Morocco
Age: Eocene (Ypresian)
Illustrate: Plate 44(10719a,b)

No. 10720
Name: *Myliobatis* sp.
Formation: Pungo River Marl Fm.
Locality: T.G.S., Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 44(10720a,b)

No. 10721
Name: *Myliobatis* sp.
Formation: Yorktown (Duplin Marl ?)
Locality: Quarry, New Bern, North Carolina, USA
Age: Miocene
Illustrate:

No. 10722
Name: *Myliobatis* sp.
Formation: unknown
Locality: Khouribga, Morocco
Age: Eocene
Illustrate: Plate 44(10722a,b)

No. 10723
Name: *Myliobatis* sp.
Formation: Shark River Marl Fm.
Locality: Neptune, New Jersey, USA
Age: Eocene
Illustrate:

No. 10724
Name: *Myliobatis* sp. Lower jaw crusher teeth
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate: Plate (10724a~c)

No. 10725
Name: *Myliobatis copeanus*
Formation: Aquia Fm.
Locality: Belvidere Beach, Virginia, USA
Age: Eocene
Illustrate: Plate 44

No. 10726
Name: *Myliobatis striatus* Buckland
Formation: unknown
Locality: Bracklesham Bay, Susse, England, UK
Age: Eocene (Auversian)
Illustrate: Plate 43(10726a,b)

No. 10727
Name: *Rhombodus laevis* Cappetta et Case
Formation: Mt.Laurel
Locality: Hop Brook, Cross Farm, Holmdel, New Jersey, USA
Age: Upper Cretaceous
Illustrate:

No. 10728
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: Processing Plant 4 mi. N. of Rosehill, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10729
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: Tranchee, R.E.T., Sidi Daoui, Morocco
Age: Upper Cretaceous (Masstrichtian)
Illustrate: Plate 44(10729a,b)

No. 10730
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: Beni-Idir, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate:

No. 10731
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: 13 km so. from Khouribga on the road to Fikh-Ben-Salah, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate: Plate 44

No. 10732
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 44

No. 10733
Name: *Rhombodus binkhorsti* Dames
Formation: Eocene Material Castle Hayne Fm.
Locality: Superior Stone ⚒ Halfway Between Warsaw & Magnolia, North Carolina, USA
Age: Upper Cretaceous
Illustrate:

No. 10734
Name: *Rhombodus binkhorsti* Dames
Formation: Peedee
Locality: Rosehill, North Carolina, USA
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 44(10734a,b)

No. 10735
Name: *Rhombodus bondoni* Arambourg
Formation: unknown
Locality: Morocco
Age: Cretaceous (Masstrichtian)
Illustrate:

No. 10736
Name: *Rhombodus binkhorsti* Dames
Formation: unknown
Locality: Khouribga, Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate: Plate 44(10736a,b)

No. 10737
Name: *Plinthicus stenodon* Cope
Formation: Pungo River Fm.
Locality: Lee Creek Mine, Aurora, North Carolina, USA
Age: Middle Miocene
Illustrate: Plate 44(10737a,b)

No. 10738
Name: *Hexanchus agassizi* Cappetta
Formation: unkown
Locality: Germany
Age: Oligocene
Illustrate:

No. 10739
Name: *Hexanchus microdon* (Agassiz)
Formation: Chalk Fm.
Locality: Gog. & Magog. Hills near Cambridge, England, UK
Age: Upper Cretaceous
Illustrate:

No. 10740
Name: *Aetobatus* sp.
Formation: Kirkwood
Locality: Shark river, Neptune, New Jersey, USA
Age: Miocene
Illustrate:

No. 10741
Name: *Aetobatus* sp. Lower jaw crusher teeth
Formation: unknown
Locality: Venice Beach, Florida, USA
Age: Miocene
Illustrate:

No. 10742
Name: *Aetobatus* sp. & *Myliobatis* sp.
Formation: Ocala Limestone
Locality: Sandersville, Georgia, USA
Age: Late Eocene
Illustrate:

No. 10743
Name: *Aetobatus irregularis* (Agassiz)
Formation: Ledien
Locality: Balegem, Belgium
Age: Eocene
Illustrate:

No. 10744
Name: *Ischyodus bifurcatus* Case
Formation: unknown
Locality: Eben-Emael, Belgium
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10745
Name: *Ischyodus bifurcatus* Case ?
Formation: Hornerstown Fm.
Locality: Cream Ridge, New Jersey, USA
Age: Palaeocene
Illustrate:

No. 10746
Name: *Ischyodus bifurcatus* Case
Formation: Navesink Mt. Laurel
Locality: C & D Canal,St.Georges,Delaware, USA
Age: Upper Cretaceous
Illustrate:

No. 10747
Name: *Coupatezia woutersi* Cappetta
Formation: unknown
Locality: Oued-Zem, Morocco
Age: Palaeocene (Thanetian)
Illustrate:

No. 10748
Name: *Ctenopristis nougareti* Arambourg
Formation: unknown
Locality: Morocco
Age: Upper Cretaceous (Maastrichtian)
Illustrate:

No. 10749
Name: *Ctenopristis nougareti* Arambourg
Formation: unknown
Locality: 13 km so. from Khouribga on the road to Fikh-Ben-Salah, Morocco
Age: Cretaceous (Maastrichtian)
Illustrate:

No. 10750
Name: *Weltonia ancistrodon* (Arambourg)
Formation: unknown
Locality: L'Oued Zem, S.E. of Casablanca, Morocco
Age: Eocene (Landenian)
Illustrate:

No. 10751
Name: *Odontaspis* sp.
Formation: Bashi Fm.
Locality: Meridian, Mississippi, USA
Age: Eocene
Illustrate:

No. 10752
Name: *Chimaera* sp. (jaw bones of ghost-shark)
Formation: Aquia Fm.
Locality: Belvidere Beach on the Virginia, side of the Potomac River, Virginia, USA
Age: Eocene
Illustrate:

No. 10753
Name: *Isurus* sp.
Formation: Clouter Creek Dike.
Locality: Charleston Harbor, South Carolina, USA
Age: Miocene
Illustrate:

No. 10754
Name: *Carcharocles* sp.
Formation: Clouter Creek Dike.
Locality: Charleston Harbor, South Carolina, USA
Age: Miocene
Illustrate:

No. 10755
Name: *Hemipristis serra* Agassiz
Formation: Clouter Creek Dike.
Locality: Charleston Harbor, South Carolina, USA
Age: Miocene
Illustrate:

No. 10756
Name: *Carcharhinus* sp.
Formation: Clouter Creek Dike.
Locality: Charleston Harbor, South Carolina, USA
Age: Miocene
Illustrate: Plate 41

No. 10757
Name: *Cretolamna* sp.
Formation: Carlisle Shale
Locality: Upton, Wyoming, USA
Age: Cretaceous
Illustrate:

中生代・新生代軟骨魚類の分類

Mesozoic and Cenozoic Chondrichthyes
(From Cappetta 1987 and Zangerl 1981)

Systematics:

Class Chondrichthyes Huxley 1880 — 軟骨魚綱
Subclass Elasmobranchii Bonaparte 1838 — 板鰓亜綱
Order Xenacanthiformes Berg 1955 — クセナカントゥス目
Family Xenacanthidae Fritsch 1889 — クセナカントゥス科
Genus *Orthacanthus* Agassiz 1843
[*Diplodus* Agassiz 1843]
[*Dittodus* Owen 1867]
Orthacanthus cylindricus Agassiz 1843
Pleuracanthus parvidens Woodward 1908
Xenacanthus moorei

Order Eugeneodontiformes Zangerl 1981 — エウゲネオドゥス目
Family Edestidae Jaekel 1899 — エデストゥス科
Parahelicampodus spaercki Nielsen 1952
(see Zangerl for further details)
Cohort Euselachii Hay 1902

Superfamily Ctenacanthoidea Zangerl 1981
Family Phoebodontiae Williams 1979 — フェボドゥス科
Genus *Phoebodus* St. John & Worthen 1875
Phoebodus sophiae St. John & Worthen 1875
Genus *Acronemus* Rieppel 1982

Superfamily Hybodontoidea Zangerl 1981
Family Hybodontidae Owen 1846 — ヒボドゥス科
Genus *Hybodus* Agassiz 1837
Hybodus reticulatus Agassiz 1837
Hybodus montanesis Case 1978
Hybodus wyomingensis Case 1987
Hybodus longiconus Agassiz
10001
Hybodus rugosus (Agassiz)
10003
Hybodus grossiconus Agassiz
10004
Hybodus delabechei Charlesworth
10005
Hybodus sp.
10002,10006
Genus *Pororhiza* Casier 1969
TYPE SPECIES: *Pororhiza molimbaensis* Casier 1969

Genus *Priohybodus* Erasmo 1960
TYPE SPECIES: *Priohybodus arambourgi* d'Erasmo 1960

Family Acrodontidae Casier 1959 アクロドゥス科
Genus *Acrodus* Agassiz 1837
TYPE SPECIES: *Acrodus gaillardoti* Agassiz 1837
10008
Acrodus lateralis Agassiz
10000,10007
Acrodus acutus (Agassiz)
10010
Acrodus braunii Agassiz
10011
Acrodus nobilis Agassiz
10012,10013
Acrodus sp.
10009,10014
Genus *Asteracanthus* Agassiz 1837
[*Strophodus* Agassiz 1838]
Asteracanthus ornatissimus Agassiz 1837
7314
Asteracanthus ornatissimus Agassiz var. *A.flettonensis* Woodward
10018
Asteracanthus (Strophodus) reticulatus (Agassiz)
10015
Asteracanthus (Strophodus) tenius Agassiz
10017
Asteracanthus magnus (Agassiz)
10016
Genus *Bdellodus* Quenstedt 1882
Bdellodus bollensis Quenstedt 1882

Family Polyacrodontidae Glikman 1964 ポリアクロドゥス科
[Lonchidiidae Herman 1977]
Genus *Lissodus* Brough 1935
[*Lonchidion* Estes 1964]
Lissodus babulskii (Cappetta & Case) 1975
Lissodus griffisi Case 1987
TYPE SPECIES: *Hybodus africanus* Broom 1909
Genus *Palaeobates* Meyer 1849
TYPE SPECIES: *Strophodus angustissimus* Agassiz 1838
Genus *Polyacrodus* Jaekel 1889
Polyacrodus angulatus Stensio 1921
Polyacrodus woodwardi Dollo 1929

Family Ptychodontidae Jaekel 1898 プティコドゥス科
Genus *Hylaeobatis* Woodward 1916
TYPE SPECIES: *Acrodus ornatus* Woodward 1899
Genus *Ptychodus* Agassiz 1838
Ptychodus mammillaris Agassiz 1839
10019,10020,10021,10022,10026,10027,10044

Ptychodus decurrens Agassiz 1839
7315
Ptychodus latissimus Agassiz 1843
Ptychodus mortoni Agassiz 1843
Ptychodus oweni Dixon 1850
Ptychodus polygyrus Agassiz 1839
Ptychodus rugosus Dixon 1850
Ptychodus whipplei Marcou 1858
10038
Ptychodus sp.
10023,10024,10025,10028,10029,10030,10031,10032,10033,10034,
10035,10036, 10037,10039,10040,10041,10042,10043

Family Steinbachodontidae Reif 1980 スタインバコドゥス科
Genus *Steinbachodus* Reif 1980
Steinbachodus estheriae Reif 1980
Hybodontoidea incertae familiae
Hybodontoidea?
Genus *Raineria* Osswald 1929
Raineria osswaldi Cappetta 1987 TYPE

Family Pseudodalatiidae Reif 1978
Genus *Pseudodolatias* Reif 1978 プセウドダラティアス科
TYPE SPECIES: *Dalatias barnstonensis* Sykes 1971
Subcohort Neoselachii Compagno 1977

Superorder Squalomorphii Compagno 1973
Order Hexanchiformes Buen 1926 カグラザメ目
Suborder Chlamydoselachoidei Berg 1958 ラブカ亜目
Family Chlamydoselachidae Garman 1884 ラブカ科
Genus *Chlamydoselachus* Garman 1884 ラブカ属
[*Chlamydoselachoides* Fowler 1947]
Chlamydoselachus anguineus Garman 1884 ﾗﾌﾞｶ
Genus *Thrinax* Pfiel 1983
TYPE SPECIES: *Thrinax baumgartneri* Pfeil 1983

Suborder Hexanchoidei Garman 1913 カグラザメ亜目
Family Hexanchidae Gray 1851 カグラザメ科
[Eonotidanidae Pfiel 1983]
Genus *Eonotidanus* Pfiel 1983
TYPE SPECIES: *Notidanus contrarius* Münster 1843
Genus *Hexanchus* Rafinesque 1810 カグラザメ属
[*Notidanus* Cuvier 1817]
TYPE SPECIES: *Squalus griseus* Bonnaterre 1788
Hexanchus agassizi Cappetta 1976
10738
Hexanchus gigas (Sismonda) 1857
Hexanchus gracilis (Davis) 1887
Hexanchus microdon (Agassiz) 1843
7372, 10045,10739
Hexanchus sp.

10046
Genus *Notidanodon* Cappetta 1975
TYPE SPECIES: *Notidanus pectinatus* Agassiz 1843
Notidanodon dentatus (Woodward) 1886
Notidanodon lanceolatus (Woodward) 1886
Notidanodon loozi (Vincent) 1876
Genus *Notorhynchus* Ayres 1855 エビスザメ属
[*Notidanion* Jordan & Hannibal 1923]
TYPE SPECIES: *Notorhynchus maculatus* Ayres 1855 Recent
Notorhynchus aptiensis (Pictet) 1865
Notorhynchus primigenius (Agassiz) 1843
7360,10047,10048
Notorhynchus cf. *N. primigenius* (Agassiz)
7284
Notorhynchus serratissimus (Agassiz) 1843
Notorhynchus sp.
7283
Genus *Weltonia* Ward 1979
TYPE SPECIES: *Notidanus (Heptranchias) ancistrodon* Arambourg 1952
Weltonia ancistrodon (Arambourg)
10750

Family Heptranchidae Barnard 1925 エドアブラザメ科
Genus *Heptranchias* Rafinesque 1810 エドアブラザメ属
[*Heptanchus* Müller et Henle 1839]
TYPE SPECIES: *Squalus cinereus* Gmelin 1789 Recent
Heptranchias howelli (Reed) 1946
Heptranchias perlo (Bonnaterre) 1788 Rcent ｴﾄﾞｱﾌﾞﾗｻﾞﾒ
Genus *Paraheptranchias* Pfeil 1981
TYPE SPECIES: *Notidanus repens* (partim) Probst 1879
= *Notidanus avenionensis* Joleaud 1912

Family Orthacodontidae Beaumont 1960 オルタコドゥス科
[Orthacodidae Glikman 1957]
Genus *Sphenodus* Agassiz 1843
[*Orthacodus* Woodward 1889]
TYPE SPECIES: *Lamna (Sphenodus) longidens* Agassiz 1843

Order Squaliformes Goodrich 1909 ツノザメ目
Family Echinorhinidae Gill 1862 キクザメ科
Genus *Echinorhinus* Blainville 1816 キクザメ属
[*Goniodus* Agassiz 1838]
TYPE SPECIES: *Squalus brucus* Bonnaterre 1788 Recent
= *Squalus spinosus* Gmelin 1789
Echinorhinus blakei Agassiz 1856
10049
Echinorhinus priscus Arambourg 1952
Echinorhinus weltoni Pfeil 1983
Genus *Paraechinorhinus* Welton (in Pfeil) 1983
TYPE SPECIES: *Paraechinorhinus barnesi* Welton (in Pfeil) 1983 TYPE
Genus *Pseudoechinorhinus* Pfeil 1983

TYPE SPECIES: *Pseudoechinorhinus mackinnoni* Pfeil 1983

Family Squalidae Bonaparte 1834 ツノザメ科
Subfamily Squalinae Bonaparte 1834
Genus *Centrophoroides* Davis 1887
Centrophoroides latidens Davis 1887
Genus *Centrophorus* Müller et Henle 1837 アイザメ属
Centrophorus granulosus Müller et Henle 1837 Recent ｳﾛｺｱｲｻﾞﾒ
Genus *Centrosqualus* Signeux 1950
TYPE SPECIES: *Squalus primaevus* Pictet 1850
(*Centrosqualus* teeth isolated-refer to *Centrophoroides* Davis)
Genus *Deania* Jordan & Snyder 1902 ヘラツノザメ属
TYPE SPECIES: *Deania eglantina* Jordan & Snyder 1902 Recent
Genus *Megasqualus* Herman 1982
TYPE SPECIES: *Notidanus orpiensis* Winkler 1874
Genus *Protosqualus* Cappetta 1977
TYPE SPECIES: *Protosqualus sigei* Cappetta 1977
Genus *Squalogaleus* Maisey 1976
TYPE SPECIES: *Squalogaleus woodwardi* Maisey 1976
Genus *Squalus* Linnaeus 1758 ツノザメ属
TYPE SPECIES: *Squalus acanthias* Linnaeus 1758 Recent ｱﾌﾞﾗﾂﾉｻﾞﾒ
Squalus minor (Daimeries) 1888
Squalus serriculus Jordan & Hannibal 1923
Squalus worlandensis (Case)
Squalus sp.
10050,10051,10052,10053

Subfamily Etmopterinae Fowler 1934 カラスザメ亜科
Genus *Etmopterus* Rafinesque 1810 カラスザメ属
[*Spinax* Cloquet 1816 / *Spinax* Cuvier 1817]
TYPE SPECIES: *Etmopterus aculeatus* Rafinesque 1810 Recent
= *Squalus spinax* Linnaeus 1758, by monotypy Recent

Subfamily Oxynotinae Gill 1872 オロシザメ亜科
Genus *Oxynotus* Rafinesque 1810 オロシザメ属
[*Centrina* Cuvier 1817]
TYPE SPECIES: *Squalus centrina* Linnaeus 1758 Recent
Oxynotus crochardi Welton 1981
Genus *Protoxynotus* Herman 1975
TYPE SPECIES: *Protoxynotus misburgensis* Herman

Subfamily Somniosinae Jordan 1888 オンデンザメ亜科
Genus *Cretascymnus* Cappetta 1980
TYPE SPECIES: *Centrophorus adonis* Signeux 1950
Genus *Scymnodon* Bocage and Capello 1864 ビロウドザメ属 (ｲﾁﾊﾗﾋﾞﾛｳﾄﾞｻﾞﾒ属)
TYPE SPECIES: *Scymnodon ringens* Bocage & Capello 1864
Genus *Somniosus* Lesueur 1818 オンデンザメ属
TYPE SPECIES: *Somniosus brevipinna* Lesueur 1818 Recent
Genus *Scymnorhinus* Bonaparte 1846
TYPE SPECIES: *Scymnorhinus lichia* Bonaparte 1846 Recent
Genuse *Isistius* Gill 1864 ダルマザメ属

TYPE SPECIES: *Scymnus brasiliensis* Quoy & Gaimard 1824 Recent ﾀﾞﾙﾏｻﾞﾒ
Genus *Squaliosus* Smith & Radcliffe 1912 ツラナガコビトサメ属
TYPE SPECIES: *Squaliosus laticaudus* Smith & Radcliffe 1912 Recent ｵｵﾒｺﾋﾞﾄｻﾞﾒ
? Squalidae incertae sedis
Genus *Centropterus* Costa 1861
TYPE SPECIES: *Centropterus lividus* Costa 1861

Order Pristiophoriformes Berg 1958 ノコギリザメ目
Family Pristiophoridae Bleeker 1859 ノコギリザメ科
Genus *Ikamauius* Keyes 1979
TYPE SPECIES: *Trygon ensifer* Davis 1888
Genus *Pliotrema* Regan 1906
TYPE SPECIES: *Pliotrema warreni* Regan 1906 Recent
Genus *Pristiophorus* Müller et Henle 1837 ノコギリザメ属
[*Propristiophorus* Woodward 1932]
TYPE SPECIES: *Pristis cirratus* Latham 1793 ﾌﾟﾘｽﾃｨｵﾌｫﾙｽ ｷﾗﾄｳｽ
Pristiophorus lineatus Applegate & Uyeno 1968
Pristiophorus sp.
7356,10054,10055,10056

Superorder Squalomorphii? Compagno 1973
Family Protospinacidae Woodward 1919 プロトスピナクス科
Genus *Protospinax* Woodward 1919
TYPE SPECIES: *Protospinax annectans* Woodward 1919

Superorder Squatinomorphii Compagno 1973 カスザメ上目
Order Squatiniformes Buen 1926 カスザメ目
Family Squatinidae Bonaparte 1838 カスザメ科
Genus *Squatina* Dumeril 1906 カスザメ属
Squatina hassei Leriche 1929
10057
Squatina subserrata Münster 1846
Squatina prima (Winkler)
10062
Squatina sp.
10058,10059,10060,10061,10063?10064,10065,10066
TYPE SPECIES: *Squalus squatina* Linnaeus 1758 Recent

Superorder Galeomorphii Compagno 1973 ネズミザメ上目
Order Heterodontiformes Berg 1937 ネコザメ目
Family Heterodontidae Gray 1851 ネコザメ科
Genus *Heterodontus* Blainville 1816 ネコザメ属
Heterodontus janefirdae Case 1980
Heterodontus rugosus (Agassiz) 1839
Heterodontus pineti Case 1981
Heterodontus sp.
10067,10068

Order Orectolobiformes Applegate 1972 テンジグザメ目
Family Hemiscylliidae Gill 1862
Genus *Acanthosyllium* Cappetta 1980

TYPE SPECIES: *Scyllium sahelalmae* Pictet & Humbert
Genus *Almascyllium* Cappetta 1980
TYPE SPECIES: *Chiloscyllium cheikheliasi* Signeux 1949
Genus *Chiloscyllium* Müller et Henle 1837 テンジグザメ属
Chiloscyllium greeni (Cappetta) 1973
Genus *Hemiscyllium* Smith 1837 モンツキテンジクザメ属
TYPE SPECIES: *Squalus ocellatus* Bonnaterre 1788 Recent
Hemiscyllium bruxelliensis Herman 1977
Genus *Mesiteia* Kramberger 1885
TYPE SPECIES: *Mesiteia emiliae* Kramberger 1885

Family Orectolobidae Jordan & Fowler 1903 テンジクザメ科
Genus *Cretorectolobus* Case 1978
TYPE SPECIES: *Cretorectolobus olsoni* Case 1978
10069
Genus *Orectoloboides* Cappeta 1977
TYPE SPECIES: *Ginglymostoma parvula* Dalinkevicius 1935
Genus *Paraginglymostoma* Herman 1982
TYPE SPECIES: *Paraginglymostoma bloti* Herman 1982
Genus *Squatiscyllium* Cappetta 1980
TYPE SPECIES: *Squatina nigeriensis* White 1934 TYPE

Family Parascylliidae Gill 1862 パラスキリゥム科
Genus *Pararhincodon* Herman in Cappetta 1976
TYPE SPECIES: *Pararhincodon crochardi* Herman 1977
Pararhincodon ypresiensis Cappetta 1976

Family Brachaeluridae Applegate 1972
Genus *Brachaelurus* Ogilby 1906 ブラケルルス科
TYPE SPECIES: *Chiloscyllium modestum* Günther 1871 Recent
Brachaelurus roklumensis Thies 1981
Brachaelurus bighornensis Case 1987
Genus *Eostegostoma* Herman 1977
TYPE SPECIES: *Eostegostoma angustum* (Nolf & Taverne) 1977
Genus *Palaeobrachaelurus* Thies 1983
TYPE SPECIES: *Palaeobrachaelurus bedfordensis* Thies 1983
Palaeobrachaelurus alisonae Thies 1983

Family Ginglymostomatidae Gill 1862 コモリザメ科
Genus *Cantioscyllium* Woodward 1889
TYPE SPECIES: *Cantioscyllium decipiens* Woodward 1889
Genus *Ginglymostoma* Müller et Henle 1837 コモリザメ属
TYPE SPECIES: *Squalus cirratus* Gmelin 1789 Recent
Ginglymostoma africanum Leriche 1927
7373
Ginglymostoma angolense Dartevelle & Casier 1943
10071
Ginglymostoma delfortriei Daimeries 1889
Ginglymostoma globidens Cappetta & Case 1975
10073
Ginglymostoma lehneri Leriche 1938

Ginglymostoma minutum (Forir) 1887
Ginglymostoma rugosum Dartevelle & Casier 1943
Ginglymostoma serra (Leidy) 1877
Ginglymostoma subafricanum Arambourg 1952
7375,10070
Ginglymostoma sp.
10072
Genus *Nebrius* Rüppel 1837 オオテンジクザメ属
TYPE SPECIES: *Nebrius concolor* Rüppell 1837 Recent
Nebrius blanckenhorni (Stromer) 1905
10075,10076
Nebrius thielensis (Winkler) 1873
10074
Nebrius maghrebianum (Casier)
7374
Nebrius sp.
10077
Genus *Protoginglymostoma* Herman 1977
TYPE SPECIES: *Ginglymostoma ypresiensis* Casier 1946

Family Rhincodontidae Garman 1913 ジンベイザメ科
Genus *Rhincodon* Smith 1829 ジンベイザメ属
[*Rhiniodon* Smith 1828]
TYPE SPECIES: *Rhincodon typus* Smith 1829 Recent ｼﾞﾝﾍﾞｲｻﾞﾒ
Genus *Palaeorhincodon* Herman 1974
TYPE SPECIES: *Palaeorhincodon wardi* Herman 1974
Orectolobiformes incertae familiae
Genus *Annea* Thies 1983
TYPE SPECIES: *Annea carinata* Thies 1983
Genus *Agaleus* Duffin & Ward 1983
TYPE SPECIES: *Agaleus dorsetensis* Duffin & Ward 1983
Genus *Phorcynis* Thiolliere 1854
[*Crossorhinus* Müller et Henle sensu Woodward 1918]
[*Palaeocrossorhinus* Fowler 1947]
TYPE SPECIES: *Phorcynis catulina* Thiolliere 1854
Genus *Palaeoscyllium* Wagner 1857
Palaeoscyllium formosum Wagner 1857

Order Lamniformes Berg 1958 ネズミザメ目
Family Odontaspididae Müller et Henle 1839 ミズワニ科
[Jaekelodontidae Glikman 1964]
Genus *Hispidaspis* Sokolov 1978
TYPE SPECIES: *Scapanorhynchus gigas* Woodward 1889
Hispidaspis horrida Sokolov 1978
Hispidaspis prisca Sokolov 1978
Genus *Hypotodus* Jaekel 1895
TYPE SPECIES: *Hypotodus verticalis* Agassiz 1843
Hypotodus robustus (Leriche)
10078,10079,10080,10081,10082
Genus *Jaekelotodus* Menner 1928
TYPE SPECIES: *Hypotodus trigonalis* Jaekel 1895

Genus *Odontaspis* Agassiz 1838　　シロワニ属（オオワニザメ属?）

TYPE SPECIES: *Squalus ferox* Risso 1810

Odontaspis aculeatus (Cappetta & Case) 1975

Odontaspis grandis (Case) 1978

Odontaspis speyeri Dartevelle & Casier 1943

Odontaspis winkleri Leriche 1905

10183

Odontaspis cuspidata Agassiz

7292

Odontaspis verticalis Agassiz

10090

Odontaspis crassidens (Dixon)

10098

Odontaspis sp.

7289, 7295, 7322, 7324, 7329, 7330, 7353, 7361,10083,10084,10085,10087, 10088,10089,10092,10093,10094,10095,10096,10097,10100,10101,10102,10103, 10104,10105,10106,10107,10108,10109,10110,10111,10112,10113,10114,10115, 10116,10117,10119,10120,10121,10122,10123,10124,10125,10126,10127,10128, 10129,10130,10131,10132,10133,10134,10135,10136,10137,10138,10139,10140, 10141,10142,10143,10144,10145,10146,10147,10148,10149,10150,10151,10152, 10153,10154,10155,10156,10157,10158,10159,10160,10161,10162,10163,10164, 10165,10166,10167,10168,10169,10170,10171,10172,10173,10174,10175,10176, 10177,10178,10179,10180,10181,10182,10184,10185?10186,10187,10188,10189, 10190,10191,10192,10193,10194,10195,10196,10751

Odontaspis spp.

7305, 7313

Carcharias steineri (Case)

10091

Genus *Pseudodontaspis* Case 1987

TYPE SPECIES: *Pseudodontaspis herbsti* Case 1987

Genus *Palaeohypotodus* Glikman 1964

Palaeohypotodus sp.

10585

TYPE SPECIES: *Odontaspis rutoti* Winkler 1874

Genus *Striatolamia* Glikman 1964

TYPE SPECIES: *Otodus macrotus* Agassiz 1843

Striatolamia striata (Winkler) 1874

10204,10206,10207,10210

Striatolamia whitei (Arambourg) 1952

Striatolamia macrota (Agassiz)

7341,10197,10198,10199,10200,10201,10202,10203,10205,10208, 10209,10211, 10213,10214,10215,10216,10217,10218,10222,10223, 10224,10225,10226,10227, 10228,10229,10230,10231,10232

Striatolamia sp.

10212,10219,10220,10221

Genus *Synodontaspis* White 1931

TYPE SPECIES: *Carcharias taurus* Rafinesque 1810 Recent

Synodontaspis acutissima (Agassiz) 1844

7355,~~10086~~,10239,10241

Synodontaspis cuspidata (Agassiz) 1843

7363,10235,10237,10238,10240,10243

Synodontaspis holmdelensis (Cappetta & Case) 1975
Synodontaspis hopei (Agassiz) 1843
Synodontaspis koerti (Stromer) 1910
Synodontaspis teretidens White 1931
10242
Synodontaspis (cuspidata) teretidens White
10099
Synodontaspis vincenti (Winkler)
10233
Synodontaspis substriata (Stromer)
10234
Synodontaspis macrota (Agassiz)
10236
Synodontaspis sp.
7364

Family Mitsukurinidae Jordan 1898 ミツクリザメ科
[Anomotodontidae Herman 1979]
Genus *Anomotodon* Arambourg 1952
TYPE SPECIES: *Anomotodon plicatus* Arambourg 1952
Anomotodon cravenensis Case 1980
Anomotodon sheppeyensis (Casier) 1966
Anomotodon sp.
10244
Genus *Mitsukurina* Jordan 1898 ミツクリザメ属
TYPE SPECIES: *Mitsukurina owstoni* Jordan 1898 Recent
(now *Scapanorhynchus owstoni* (Jordan))
Mitsukurina lineata (Probst) 1879
Mitsukurina maslinensis (Pledge) 1967
Genus *Scapanorhynchus* Woodward 1889
Scapanorhynchus texanus (Roemer) 1849
7335, 7343,10245,10246,10247,10248,10249,10250,10253,10256,10258,
10262, 10267,10268,10269
Scapanorhynchus raphiodon Agassiz 1844
Scapanorhynchus sp.
10251,10252,10254,10255,10257,10259,10260,10261,10263,10264,10265,10266
TYPE SPECIES: *Rhinognathus lewisii* Davis 1887

Family Lamnidae Müller et Henle 1838 ネズミザメ科
Genus *Carchariolamna* Hora 1939
TYPE SPECIES: *Carchariolamna heroni* Hora 1939
Genus *Carcharodon* Müller et Henle 1838 ホホジロザメ属
TYPE SPECIES: *Squalus carcharias* Linnaeus 1758 Recent
Carcharodon sulcidens (Linnaeus)
7349, 7350
Carcharodon carcharias (Linnaeus)
7282,10270,10271,10272,10273,10275,10276,10278,10280
Carcharodon sp.
10274,10277,10279
Genus *Carcharoides* Ameghino 1901
TYPE SPECIES: *Carcharoides totuserratus* Ameghino 1901

Carcharoides catticus (Phillipi) 1846

Genus *Isurolamna* Cappetta 1976

TYPE SPECIES: *Odontaspis hopei* var. *O. affinis* Casier 1946

Genus *Isurus* Rafinesque 1810 アオザメ属

TYPE SPECIES: *Isurus oxyrhinchus* Rafinesque 1810 Recent

Isurus hastalis (Agassiz) 1843
7276, 7321, 7334, 7351, 7362,10281,10287,10288,10289,10291,10292, 10293, 10294,10295,10296,10302,10305,10307,10310 10086

Isurus planus (Agassiz) 1856
7352, 7354,10301

Isurus praecursor (Leriche) 1905
10284,10290

Isurus retroflexus (Agassiz) 1843

Isurus macrorhiza Pictet & Campiche
10286

Isurus sp.
7309, 7331,10282,10283,10285,10297,10298,10299,10300,10303,10304, 10306, 10308,10309,10311,10312,10753

Genus *Lamna* Cuvier 1817 ネズミザメ属

TYPE SPECIES: *Squalus cornubicus* Gmelin in Linnaeus 1789 Recent

Lamna sp.
10313

Genus *Xiphodolamia* Leidy 1877

Xiphodolamia eocaena (Woodward) 1889

TYPE SPECIES: *Xiphodolamia ensis* Leidy 1877
10314

Family Cretoxyrhinidae Glikman 1958 クレトクシリナ科

Genus *Cretodus* Sokolov 1965

TYPE SPECIES: *Otodus semiplicatus* Münster (in Agassiz) 1843

Cretodus borodini (Cappetta & Case) 1975

Cretodus crassidens (Dixon) 1850

Plicatolamna arcuata (Woodward) 1894 sensu stricto

Cretodus (Plicatolamna) arcuata (Woodward)
10317,10318,10319,10320,10324,10325,10326,10327

Cretodus sp.
10315,10316,10321,10322,10323

Genus *Cretolamna* Glikman 1958

TYPE SPECIES: *Lamna appendiculata* Agassiz 1843

Cretolamna appendiculata (Agassiz) 1843
7307, 7336, 7340,10328,10333,10335,10336,10340,10341,10342,10344, 10349, 10360,10364,10368,10375,10392,10398

Cretolamna biauriculata maroccana Arambourg 1935
7303,10355

Cretolamna aschersoni (Stromer) 1905
10383,10391,10394

Cretolamna twiggsensis (Case) 1981

Cretolamna woodwardi Herman
10332

Cretolamna biauriculata (Wanner)
10337

Cretolamna biauriculata var. *C. maroccana* (Arambourg)
10330,10359,10377
Cretolamna sulcata (Geinitz)
10334
Cretolamna caraibaea var. *C. africana* (Dartevelle & Casier)
10331
Cretolamna sp.
10329,10339,10345,10346,10347,10348,10351,10352,10356,10357,
10361,10362, 10363,10365,10366,10367,10369,10370,10371,10372,
10373,10374,10378,10379, 10380,10381,10382,10384,10385,10386,
10388,10389,10390,10393,10395,10396,10397,10399,10757
Serratolamna amonensis (Cappetta & Case)
10118
Serratolamna serrata (Agassiz)
10338,10343,10350,10353,10354,10358,10376,10387
Genus *Cretoxyrhina* Glikman 1958
Cretoxyrhina mantelli (Agassiz) 1843
10642
TYPE SPECIES: *Isurus denticulatus* Glikman 1957
Genus *Leptostyrax* Williston 1900
TYPE SPECIES: *Leptostyrax bicuspidatus* Williston 1900
Genus *Palaeocarcharodon* Casier 1960
Palaeocarcharodon orientalis (Sinzow) 1899
species: *landanensis* Leriche 1919 in synonomy Case 1989
Genus *Paraisurus* Glikman 1957
TYPE SPECIES: *Oxyrhina macrorhiza* Pictet & Campiche 1858
Paraisurus compressus Glikman 1978
Paraisurus elegans Glikman 1978
Paraisurus lanceolatus Glikman 1978
Genus *Protolamna* Cappetta 1980
Protolamna sokolovi Cappetta 1980
Protolamna sp.
10400
Genus *Pseudoisurus* Glikman 1957
TYPE SPECIES: *Pseudoisurus tomosus* Glikman 1957

Family Otodontidae Glikman 1964
Genus *Carcharocles* Jordan & Hannibal 1923
Carcharocles angustidens (Agassiz) 1843
10405
Carcharocles debrayi (Leriche) 1906
Carcharocles sokolowi (Jaekel)
Carcharocles megalodon (Charlesworth)
7291, 7296, 7332,10406,10407,10412,10416,10417,10419,10420,10422,
10423,10425
Carcharocles sp.
7320,10402,10404,10408,10409,10410,10411,10413,10414,10415,10418,
10421, 10424,10754
TYPE SPECIES: *Carcharocles auriculatus* (Blainville) 1818
7333,10403
Carcharocles cf. *C. auriculatus* Blainville

10401
Genus *Otodus* Agassiz 1843
TYPE SPECIES: *Otodus obliquus* Agassiz 1843
7319, 7344,10426,10427,10428,10429,10430,10432,10433,10434
not *Lamna obliqua* (Agassiz)
Otodus sp.
10431
Genus *Parotodus* Cappetta 1980
TYPE SPECIES: *Isurus benedeni* Le Hon 1871
Parotodus benedeni (Le Hon)
7286

Family Alopiidae Bonaparte 1838 オナガザメ科
Genus *Alopias* Rafinesque 1810 オナガザメ属
TYPE SPECIES: *Alopias macrourus* Rafinesque 1810
Alopias hassei (Noetling) 1885
Alopias latidens (Leriche) 1909
Alopias leeensis Ward 1978
Alopias superciliosus (Lowe) 1840 ハチワレ
Alopias cf. *A. superciliosus* (Lowe)
7287
Alopias cf. *A. vulpinus* (Bonnaterre)
10435
Alopias vulpinus (Bonnaterre) (recent and fossil) マオナガ
Genus *Paranomotodon* Herman in Cappetta & Case 1975
TYPE SPECIES: *Oxyrhina angustidens* Reuss 1845
Paranomotodon angustidens (Reuss) 1845
10438
Paranomotodon sp.
10436,10437

Family Cetorhinidae Gill 1862 ウバザメ科
Genus *Cetorhinus* Blainville 1816 ウバザメ属
TYPE SPECIES: *Squalus maximus* Gunner 1765
Cetorhinus occidentalis (Jordan & Hannibal) 1923

Family Anacoracidae Casier 1947
Genus *Pseudocorax* Priem 1897
Pseudocorax granti Cappetta & Case 1975
Pseudocorax laevis (Leriche) 1906
10443
TYPE SPECIES: *Corax affinis* Münster (in Agassiz) 1843
Pseudocorax affinis (Münster)
10439,10440,10441
Pseudocorax sp.
10442
Genus *Microcorax* Cappetta and Case 1975
TYPE SPECIES: *Microcorax crassus* Cappeta & Case 1975
Genus *Paracorax* Cappetta 1977
TYPE SPECIES: *Galeocerdo jaekeli* Woodward 1895
Genus *Squalicorax* Whitley 1939

Squalicorax falcatus (Agassiz) 1843
10450,10451,10452,10453,10454,10471,10479,10480,10481,10483,
10485,10486, 10488,10489,10490,10492,10493,10497,10498,10505
Squalicorax kaupi (Agassiz) 1843
7297,10446,10448,10455,10456,10457,10458,10459,10460,10463,10468,
10472, 10475,10476,10478,10482,10503,10504,10506
TYPE SPECIES: *Corax pristodontus* Agassiz 1843
Squalicorax pristodontus (Agassiz) 1843
7337, 7345,10444,10447,10461,10462,10465,10467,10469,10470,10473,
10474, 10477,10484,10487,10494,10495,10496
Squalicorax yangaensis (Dartevelle & Casier)
10449
Squalicorax sp.
10252,10445,10464,10466,10491,10499,10500,10501,10502
? Lamniformes incertae familiae
Genus *Palaeocarcharias* De Beaumont 1960
TYPE SPECIES: *Palaeocarcharias stromeri* De Beaumont 1960

Order Carcharhiniformes Compagno 1973 メジロザメ目
Family Scyliorhinidae Gill 1862 トラザメ科
The genus *Scyliorhinus* is heterogeneous
Genus *Galeus* Rafinesque 1810 ヤモリザメ属
TYPE SPECIES: *Galeus melastomus* Rafinesque 1810
Genus *Macrourogaleus* Fowler 1947
TYPE SPECIES: *Pristiurus hassei* Woodward 1889
Genus *Megascyliorhinus* Cappetta and Ward 1977
Megascyliorhinus miocaenicus (Antunes & Jonet) 1970
TYPE SPECIES: *Megascyliorhinus cooperi* Cappetta & Ward 1977
Genus *Protoscyliorhinus* Herman 1977
TYPE SPECIES: *Protoscyliorhinus bettrechiensis* Herman 1977
Genus *Pteroscyllium* Cappetta 1980
Pteroscyllium dubertreti Cappetta 1980
TYPE SPECIES: *Pteroscyllium signeuxi* Cappetta 1980
Genus *Scyliorhinus* Blainville 1816 トラザメ属
TYPE SPECIES: *Squalus canicula* Linnaeus 1758 Recent
Scyliorhinus arambourgi Cappetta 1980
Scyliorhinus bloti Cappetta 1980
Scyliorhinus burnhamensis Cappetta 1976
Scyliorhinus casieri Cappetta 1976
Scyliorhinus coupatezi Herman 1974
Scyliorhinus distans (Probst) 1879
Scyliorhinus gilberti Casier 1946
Scyliorhinus joleaudi Cappetta 1970
Scyliorhinus subulidens Arambourg 1952
10509
Scyliorhinus woodwardi Cappetta 1976
Scyliorhinus brivesi Arambourg
10507
Scyliorhinus africanus Arambourg
10508
Scyliorhinus sp.

10510

Family Triakidae Gray 1851 ドチザメ科
Tribe Galeorhinini Gill 1862
Genus *Galeorhinus* Blainville 1816
TYPE SPECIES: *Squalus galeus* Linnaeus 1758 Recent
Galeorhinus cuvieri (Agassiz) 1835
Galeorhinus girardoti Herman 1977
Galeorhinus lefevrei (Daimeries) 1891
Galeorhinus minor (Agassiz) 1843
Galeorhinus minutissimus Arambourg 1952
10512
Galeorhinus ypresiensis Casier 1946
Galeorhinus sp.
7288, 7311,10511,10513,10514,10515,10516,10517,10518
Tribe Triakini Gray 1851
Genus *Archaeotriakis* Case 1978
TYPE SPECIES: *Archaeotriakis rochelleae* Case 1978
Archaeotriakis ornatus Case 1987
Genus *Mustelus* Linck 1730 ホシザメ属
TYPE SPECIES: *Squalus mustelus* Linnaeus 1758 Recent
Mustelus vanderhoefti Herman 1982
Mustelus whitei Cappetta 1976
Genus *Palaeogaleus* Gurr 1962
TYPE SPECIES: *Scyllium vincenti* Daimeries 1888
Palaeogaleus brivesi (Arambourg) 1952
Palaeogaleus faujasi (Van De Geyn) 1937
Palaeogaleus havreensis Herman 1977
Genus *Paratriakis* Herman 1977
TYPE SPECIES: *Paratriakis bettrechiensis* Herman 1977
Paratriakis curtirostris (Davis) 1887
Genus *Triakis* Müller et Henle 1838 ドチザメ属
TYPE SPECIES: *Triakis scyllium* Müller & Henle 1838 Recent ﾄﾞﾁｻﾞﾒ
Triakis angustidens Cappetta 1973
Triakis ruetimeyeri Casier 1958
Triakis wardi Cappetta 1976

Family Hemigaleidae Hasse 1879 (1885) ヒレトガリザメ科
Genus *Chaenogaleus* Gill 1862
Chaenogaleus macrostoma Gill 1862
Genus *Paragaleus* Budker 1935
TYPE SPECIES: *Paragaleus gruveli* Budker 1935
Paragaleus pulchellus (Jonet) 1966
Genus *Hemipristis* Agassiz 1843 カマヒレザメ属
[*Dirrhizodon* Klunzinger 1871]
[*Hennigia* Ihering 1927]
TYPE SPECIES: *Hemipristis serra* Agassiz 1843
7277, 7327,10519,10520,10522,10523,10524,10525,10526,10527,10528,
10530, 10531,10532,10533,10755
Hemipristis curvatus Dames 1883
Hemipristis sp.

10521,10529
species *uyattdurhami* White 1956 in synonomy C&C 1990 [H.*curvatus* Dames]

Family Carcharhinidae Jordan & Evermann 1896 メジロザメ科
Genus *Abdounia* Cappetta 1980
TYPE SPECIES: *Eugaleus beaugei* Arambourg
Abdounia biauriculata (Casier) 1946
Abdounia enniskilleni (White) 1956
Abdounia furimskyi (Case) 1980
Abdounia minutissima (Winkler) 1873
10534
Abdounia recticona (Winkler) 1873
Abdounia sp.
10535,10536,10537,10538,10539,10540
Genus *Isogomphodon* Gill 1861 ツバクロザメ属
TYPE SPECIES: *Carcharias oxyrhynchus* Müller et Henle 1841 Recent
Isogomphodon acuarias (Probst) 1879
Isogomphodon caunellensis (Cappetta) 1970
Isogomphodon frequens (Dames) 1883
Isogomphodon lerichei (Dartevelle et Casier) 1943
Genus *Carcharhinus* Blainville 1816 メジロザメ属
TYPE SPECIES: *Carcharias melanopterus* Quoy & Gaimard 1824 Recent
Carcharhinus elongatus (Leriche) 1910
Carcharhinus priscus (Agassiz) 1843
10574
Carcharhinus egertoni (Agassiz) 1843
Carcharhinus sp.
7280, 7306, 7323,10541,10542,10543,10544,10545,10546,10547,10548,10549,
10550,10551,10552,10553,10554,10555,10556,10557,10558,10559,10560,10561,
10562,10563,10564,10565,10566,10567,10568,10569,10570,10571,10572,10573,
10575,10576,10577,10578,10579,10580,10581,10582,10583,10584,10756
Carcharhinus spp.
7305
Genus *Eogaleus* Cappetta 1975
TYPE SPECIES: *Eogaleus bolcensis* Cappetta 1975
Genus *Galeocerdo* Müller et Henle 1838 イタチザメ属
Galeocerdo aduncas Agassiz 1843
7325,10593,10594,10597,10600,10607,10609,10617,10619,10621
Galeocerdo contortus Gibbes 1849
7326,10586,10591,10592,10596,10598,10606,10610,10618,10620,10622,10623
Galeocerdo cuvieri (Peron & Lesueur) 1822 ｲﾀﾁｻﾞﾒ
7278,10587,10595,10604,10605,10608,10616,10625,10627
Galeocerdo eaglesomei White 1955
Galeocerdo latidens (Agassiz) 1843
10589
Galeocerdo mayumbensis Dartevelle & Casier 1943
Galeocerdo sp.
10588,10590,10599,10601,10602,10603,10611,10612,10613,10614,10615,
10624, 10626,10628,10629
Genus *Negaprion* Whitley 1940 レモンザメ属
TYPE SPECIES: *Aprionodon acutidens queenslandicus* Whitley 1939 Recent ﾚﾓﾝｻﾞﾒ

Negaprion sp.
10630,10631
Genus *Physogaleus* Cappetta 1980
TYPE SPECIES: *Trigonodus secundus* Winkler 1874
Physogaleus latus (Storms) 1894
Genus *Prionace* Cantor 1849 ヨシキリザメ属
TYPE SPECIES: *Squalus glaucus* Linnaeus 1758 Recent
Genus *Pterolamiops* Springer 1951
TYPE SPECIES: *Squalus longimanus* Poey 1861 Recent
Pterolamiops longimanus (Poey)
7281, 7339,10633,10635,10636
Pterolamiops sp.
10632,10634
Genus *Rhizoprionodon* Whitley 1929 ヒラガシラ属
TYPE SPECIES: *Carcharias (Scoliodon) crenidens* Klunzinger 1880 Recent
Rhizoprionodon gantourensis (Arambourg) 1952
Rhizoprionodon fischeuri (Joleaud) 1912

Family Sphyrnidae Gill 1872 シュモクザメ科
Genus *Sphyrna* Rafinesque 1810 シュモクザメ属
TYPE SPECIES: *Squalus zygaena* Linnaeus 1758
Sphyrna arambourgi Cappetta 1970
Sphyrna sp.
10640
Carcharhiniformes incertae familiae
Genus *Palaeoscyllium* Marck 1863
TYPE SPECIES: *Palaeoscyllium dechenei* Marck 1863

Galeomorphii incertae ordinis
Family Palaeospinacidae Regan 1906 パレオスピナクス科
Genus *Nemacanthus* Agassiz 1837
TYPE SPECIES: *Nemacanthus monilifer* Agassiz 1837
Genus *Palaeospinax* Egerton 1872
TYPE SPECIES: *Palaeospinax priscus* Egerton 1872
Genus *Paraorthacodus* Glikman 1957
TYPE SPECIES: *Sphenodus recurvus* Trautschold 1877
Paraorthacodus andersoni (Case) 1978
Paraorthacodus clarkii (Eastman) 1901
Paraorthacodus eocaenus (Leriche) 1902
Genus *Synechodus* Woodward 1888
TYPE SPECIES: *Hybodus dubrisiensis* Mackie 1863
Synechodus lerichei Herman 1977
Synechodus turneri Case 1987
Synechodus sp.
10637,10638
? Galeomorphii incertae sedis
Genus *Parasquatina* Herman 1982
TYPE SPECIES: *Parasquatina cappettai* Herman 1982
Genus *Reifia* Duffin 1980
TYPE SPECIES: *Reifia minuta* Duffin 1980
Neoselachii incertae ordinis

Genus *Hueneichthys* Reif 1977
TYPE SPECIES: *Hueneichthys costatus* Reif 1977
Genus *Odontorhytis* Böhm 1926
TYPE SPECIES: *Odontorhytis pappenheimi* Böhm 1926
Genus *Vallisia* Duffin 1982
TYPE SPECIES: *Vallisia coppi* Duffin 1982

Superorder Batomorphii Cappetta 1980 エイ上目
Order Rajiformes Berg 1940 エイ目
Suborder Rhinobatoidei Fowler 1941 サカタザメ亜目
Family Rhynchobatidae Garman 1913 トンガリサカタザメ科
Genus *Rhynchobatus* Müller et Henle 1837 トンガリサカタザメ属
TYPE SPECIES: *Rhinobatus laevis* Schneider 1810 Recent
Rhynchobatus pristinus (Probst) 1877
Rhynchobatus vincenti Jaekel 1894

Family Rhinobatidae Müller et Henle 1838 サカタザメ科
Genus *Arthropterus* Agassiz 1843
TYPE SPECIES: *Arthropterus rileyi* Agassiz 1843
Genus *Asterodermus* Agassiz 1843
TYPE SPECIES: *Asterodermus platypterus* Agassiz 1843
Genus *Belemnobatis* Thiolliere 1854
TYPE SPECIES: *Belemnobatis sismondae* Thiolliere 1854
Genus *Breviacanthus* Maisey 1976
TYPE SPECIES: *Nemacanthus brevisi* Phillips 1871
Genus *Euryartha* Agassiz 1843
TYPE SPECIES: *Euryartha muensteri* Agassiz 1843
Genus *Jurobatos* Thies 1983
TYPE SPECIES: *Jurobatos cappettai* Thies 1983
Genus *Rhinobatos* Linck 1790 サカタザメ属
TYPE SPECIES: *Raja rhinobatos* Linnaeus 1758 Recent
Rhinobatos bruxelliensis (Jaekel) 1894
Rhinobatos casieri Herman in Cappett & Case 1975
Rhinobatos incertus Cappetta 1973
Genus *Rhombopterygia* Cappetta 1980
TYPE SPECIES: *Rhombopterygia rajoides* Cappetta 1980
Genus *Spathobatis* Thiolliere 1854
TYPE SPECIES: *Spathobatis bugesiacus* Thiolierre 1854
Spathobatis moorbergensis Thies 1983

Family Platyrhinidae Jordan 1923 ウチワザメ科
Genus *Platyrhina* Müller et Henle 1831 ウチワザメ属
TYPE SPECIES: *Raja sinensis* Lacèpéde 1803 Recent
Platyrhina egertoni (Zigno) 1876
Rhinobatoidei incertae sedis
Genus *Myledaphus* Cope 1876
Myledaphus bipartitus Cope 1876
10639
Genus *Parapalaeobates* Weiler 1930
TYPE SPECIES: *Strophodus pygmaeus* Zittle in Quaas 1902
Genus *Pseudohypolophus* Cappetta and Case 1975

Pseudohypolophus mcnultyi (Thurmond)
10649
TYPE SPECIES: *Hypolophus mcnultyi* Thurmond 1971
Genus *Protoplatyrhina* Case 1978
TYPE SPECIES: *Protoplatyrhina renae* Case 1978
10641
Genus *Squatirhina* Casier 1947
TYPE SPECIES: *Squatirhina lonzeensis* Casier 1947
Squatirhina roessingi Case 1987

Suborder Rajoidei Garman 1913 ガンギエイ亜目
Family Rajidae Bonaparte 1831 ガンギエイ科
Genus *Raja* Linnaeus 1758 ガンギエイ属
TYPE SPECIES: *Raja batis* Linnaeus 1758 Recent
Raja casieri Steurbaut & Herman 1978
Raja antiqua Agassiz
7358,10648
Raja mucronata Woodward
7367
Raja clavata Agassiz
7357?,10644
Raja dux Cope
10642,10645,10646,10647
Raja sp.
10643
Genus *Pararaja* Cappetta 1980
TYPE SPECIES: *Rhinobatus expansus* Davis 1887

Family Cyclobatidae Cappetta 1980 キクロバティス科
Genus *Cyclobatis* Egerton 1844
TYPE SPECIES: *Cyclobatis oligodactylus* Egerton 1844
Cyclobatis major Davis 1887
Cyclobatis tuberculatus Cappetta 1980

Suborder Sclerorhynchoidei Cappetta 1980 スクレロリンクス亜目
Family Sclerorhynchidae Cappetta 1974 スクレロリンクス科
Genus *Ankistorhynchus* Casier 1964
TYPE SPECIES: *Ankistorhynchus lonzeensis* Casier 1964
Ankistorhynchus major Cappetta and Case 1975
Ankistorhynchus washakiensis Case 1987
Genus *Ctenopristis* Arambourg 1940
TYPE SPECIES: *Ctenopristis nougareti* Arambourg 1940
10748,10749
Genus *Dalpiazia* Checchia-Rispoli 1933
TYPE SPECIES: *Dalpiazia stromeri* Checchia-Rispoli 1933
Genus *Ganopristis* Arambourg 1935
TYPE SPECIES: *Ganopristis leptodon* Arambourg 1935
Genus *Ischyrhiza* Leidy 1856
Ischyrhiza avonicola Estes 1964
TYPE SPECIES: *Ischyrhiza mira* Leidy 1856
10650,10651,10652,10653,10654,10655

Ischyrhiza basinensis Case 1987
Genus *Libanopristis* Cappetta 1980
TYPE SPECIES: *Sclerorhynchus hiram* Hay 1903
Genus *Marckgrafia* Weiler 1935
TYPE SPECIES: *Marckgrafia libyca* Weiler 1935
Genus *Micropristis* Cappetta 1980
TYPE SPECIES: *Sclerorhynchus solomonis* Hay 1903
Genus *Onchopristis* Stromer 1917
TYPE SPECIES: *Gigantichthys numidus* Haug 1905
Onchopristis dunklei McNulty & Slaughter 1962
Genus *Onchosaurus* Gervais 1852
TYPE SPECIES: *Onchosaurus radicalis* Gervats 1852
Onchosaurus pharao (Dames) 1887
Genus *Pucapristis* Schaeffer 1963
TYPE SPECIES: *Pucapristis branisi* Schaeffer 1963
Genus *Schizorhiza* Weiler 1930
TYPE SPECIES: *Schizorhiza stromeri* Weiler 1930
Genus *Sclerorhynchus* Woodward 1889
TYPE SPECIES: *Sclerorhynchus atavus* Woodward 1889
Sclerorhynchus sp.
7310
Genus *Borodinopristis* Case 1987
TYPE SPECIES: *Borodinopristis schwimmeri* Case 1987

Family incertae sedis (Rhinobatoidei or Sclerorhynchoidei)
Genus *Ptychotrygon* Jaekel 1894
TYPE SPECIES: *Ptychodus triangularis* Reuss 1845
Ptychotrygon agujaensis McNulty & Slaughter 1972
Ptychotrygon blainensis Case 1978
Ptychotrygon hooveri McNulty & Slaughter 1972
Ptychotrygon ledouxi Cappetta 1973
Ptychotrygon slaughteri Cappetta & Case 1975
Ptychotrygon boothi Case 1987
Ptychotrygon ellae Case 1987
Ptychotrygon greybullensis Case 1987
Ptychotrygon vermiculata Cappetta 1975

Family Pristidae Bonaparte 1838 ノコギリエイ科
Genus *Anoxypristis* White & Moy-Thomas 1941 ノコギリエイ属
TYPE SPECIES: *Pristis cuppidatus* Latham 1794 Recent
Anoxypristis fajumensis (Stromer) 1905
Anoxypristis mucrodens White
7318
Anoxypristis sp.
10656,10657
Genus *Peyeria* Weiler 1935
TYPE SPECIES: *Peyeria libyca* Weiler 1935
Genus *Pristis* Linck 1790
TYPE SPECIES: *Squalus pristis* Linnaeus 1758 Recent
Pristis aquitanicus Delfortrie 1872
Pristis amblyodon Cope 1869

Pristis lathami Galeotti 1837
10659
Pristis pickeringi Case 1981
Pristis sp.
10658,10660,10661,10662,10663,10664,10665,10666,10667

Order Torpediniformes Buen 1926 シビレエイ目
Super family Torpedinoidea Compagno 1973
Family Torpedinidae Bonaparte 1838 シビレエイ属
Genus *Eotorpedo* White 1934
TYPE SPECIES: *Eotorpedo jaekeli* White 1934
Eotorpedo hilgendorfi (Jaekel) 1904
Eotorpedo nolfi Herman 1974
Genus *Torpedo* Houttuyn 1764 ヤマトシビレエイ属
TYPE SPECIES: *Raja torpedo* Linnaeus 1758 Recent

Super family Narcinidea Compagno 1973
Family Narcinidea Gill 1862
Genus *Narcine* Henle 1834 タイワンシビレエイ属
TYPE SPECIES: *Torpedo brasiliensis* Olfers 1831 Recent
Narcine molini Jaekel 1894

Order Myliobatiformes Compagno 1973 トビエイ目
Super family Dasyatoidea Whitley 1940 アカエイ上目
Family Dasyatidae Jordan 1888 アカエイ科
Genus *Dasyatis* Rafinesque 1810 アカエイ属
TYPE SPECIES: *Dasyatis uja* Rafinesque 1810 [*Raja pastinaeus* Linnaeus 1758, by Monotypy] Recent
Dasyatis cavernosa (Probst) 1877
Dasyatis borodini Case 1981
Dasyatis charlisae Case 1981
Dasyatis rugosa (Probst) 1877
Dasyatis tetraedra Arambourg
7376
Dasyatis sp.
10668,10669,10670
Genus *Hypolophites* Stromer 1910
TYPE SPECIES: *Hypolophites myliobatoides* Stromer 1910
Hypolophites mayumbensis Leriche 1913
Hypolophites thaleri Cappetta 1972
Genus *Hypolophodon* Cappetta 1980
TYPE SPECIES: *Hypolophus sylvestris* White 1913

Family Urolophidae Gray 1851 ヒラタエイ科
Genus *Urolophus* Müller et Henle 1837 ヒラタエイ属
TYPE SPECIES: *Raja cruciata* Lacepede 1804 Recent

Family Gymnuridae Fowler 1934 ツバクロエイ科
Genus *Gymnura* van Hasselt 1823 ツバクロエイ属
[*Pteroplatea* Müller et Henle 1841]
TYPE SPECIES: *Raja micrura* Schneider 1801 Recent

Genus *Jacquhermania* Cappetta 1982
TYPE SPECIES: *Cestracion duponti* Winkler 1874

Dasyatoidea incertae familiae
Genus *Arechia* Cappetta 1983
TYPE SPECIES: *Arechia arambourgi* Cappetta 1983
Genus *Coupatezia* Cappetta 1982
TYPE SPECIES: *Coupatezia woutersi* Cappetta 1982
10747
Genus *Heterotorpedo* Ward 1983
TYPE SPECIES: *Heterotorpedo fowleri* Ward 1983
Genus *Merabatis* Cappetta 1983
TYPE SPECIES: *Raja praealba* (partim) Arambourg 1952

Super family Myliobatoidea Compagno 1973 トビエイ上目
Family Myliobatidae Bonaparte 1838 トビエイ科
Genus *Aetobatus* Blainville 1816 マダラトビエイ属
TYPE SPECIES: *Raja narinari* Euphrasen 1790 Recent
Aetobatus arcuatus (Agassiz) 1843
Aetobatus irregularis (Agassiz)
10671,10673,10674,10743
Aetobatus sp.
7285, 7308,10672,10740,10741,10742
Genus *Aetomylaeus* Garman 1908 アオスジトビエイ属
TYPE SPECIES: *Myliobatis maculatus* Gray 1832-34 Recent
Genus *Apocopodon* Cope 1885
TYPE SPECIES: *Apocopodon sericeus* Cope 1885
Genus *Brachyrhizodus* Romer 1942 (Protorhinoptera Case)
TYPE SPECIES: *Brachyrhizodus wichitaensis* Romer 1942
10675,10676,10677,10678,10679,10680,10681
Genus *Igdabatis* Cappetta 1972
TYPE SPECIES: *Igdabatis sigmodon* Cappetta 1972
Genus *Myliobatis* Cuvier 1817 トビエイ属
TYPE SPECIES: *Raja aquila* Linnaeus 1758 Recent
Myliobatis dixoni Agassiz 1843
7366
Myliobatis jugosus Leidy 1877
7371
Myliobatis raouxi Arambourg
7368
Myliobatis striatus Buckland
10726
Myliobatis toliapicus Agassiz
10682,10685,10687
Myliobatis copeanus
10725
Myliobatis sp.
7279, 7290, 7304, 7312, 7328, 7365, 7370,10683,10684,10686,10688,10689,
10690,10691,10692,10693,10694,10695,10696,10697,10698,10699,10700,10701,
10702,10703,10704,10705,10706,10707,10708,10709,10710,10711,10712,10713,
10714,10715,10716,10717,10718,10719,10720,10721,10722,10723,10724,10742

Family Rhinopteridae Jordan & Evermann 1896 ウシバナトビエイ科
Genus *Rhinoptera* Cuvier 1829
TYPE SPECIES: *Myliobatis marginata* Saint-Hilaire 1809 Recent
Rhinoptera prisca Woodward 1907 ウシバナトビエイ属

Family Rhombodontidae Cappetta 1987
Genus *Pucabatis* Cappetta 1975
TYPE SPECIES: *Pucabatis hoffstetteri* Cappetta 1975
Genus *Rhombodus* Dames 1881
Rhombodus binkhorsti Dames 1881
7316, 7338,10728,10729,10730,10731,10732,10733,10734,10736
Rhombodus laevis Cappetta & Case 1975
10727
Rhombodus bondoni Arambourg
10735

Super family Mobuloidea Whitley 1936 イトマキエイ上科
Family Mobulidae Gill 1893 イトマキエイ科
Genus *Archaeomanta* Herman 1979
TYPE SPECIES: *Archaeomanta melenhorsti* Herman 1979
Archaeomanta priemi Herman 1979
Genus *Burnhamia* Cappetta 1976
TYPE SPECIES: *Rhinoptera daviesi* Woodward 1889
Burnhamia fetahi Cappetta 1985
Burnhamia daviesi (Woodward)
7369
Genus *Manta* Bancroft 1829 オニイトマキエイ属
TYPE SPECIES: *Manta americana* Bancroft 1829 Recent
Manta melanyae Case 1980
Genus *Mobula* Rafinesque 1810 イトマキエイ属
Mobula pectinata Cappetta 1970
TYPE SPECIES: *Mobula auriculata* Rafinesque 1810 Recent
Genus *Plinthicus* Cope 1869
TYPE SPECIES: *Plinthicus stenodon* Cope 1869
7293, 7294,10737

*1

Subclass Holocephali Bonaparte 1832-41 全頭亜綱
Order (unnamed)
Suborder Chimaerina Zangerl ギンザメ亜目
Family Chimaeridae Rafinesque 1815 ギンザメ科
Genus *Edaphodon*
Edaphodon sp.
7300, 7359
Genus *Chimaera* ギンザメ属
Chimaera sp.
10752
Genus *Ischyodus*
Ischyodus bifurcatus Case

7299, 7301,10744,10745,10746

Ischyodus sp.

7346

＊2

学名不定　　7342

＊1 Copied from Cappetta, H. 1987 Handbook of Paleoichthyology, Volume 3B, Gustav Fischer Verlag, Stuttgart, Germany.

＊2 Zangerl R. 1981 Handbook of Palaeoichthyoligy, Volume 3A, Gustav Ficher Verlag, Stuttgart, Germany.

Plate 5 (× 1.0)

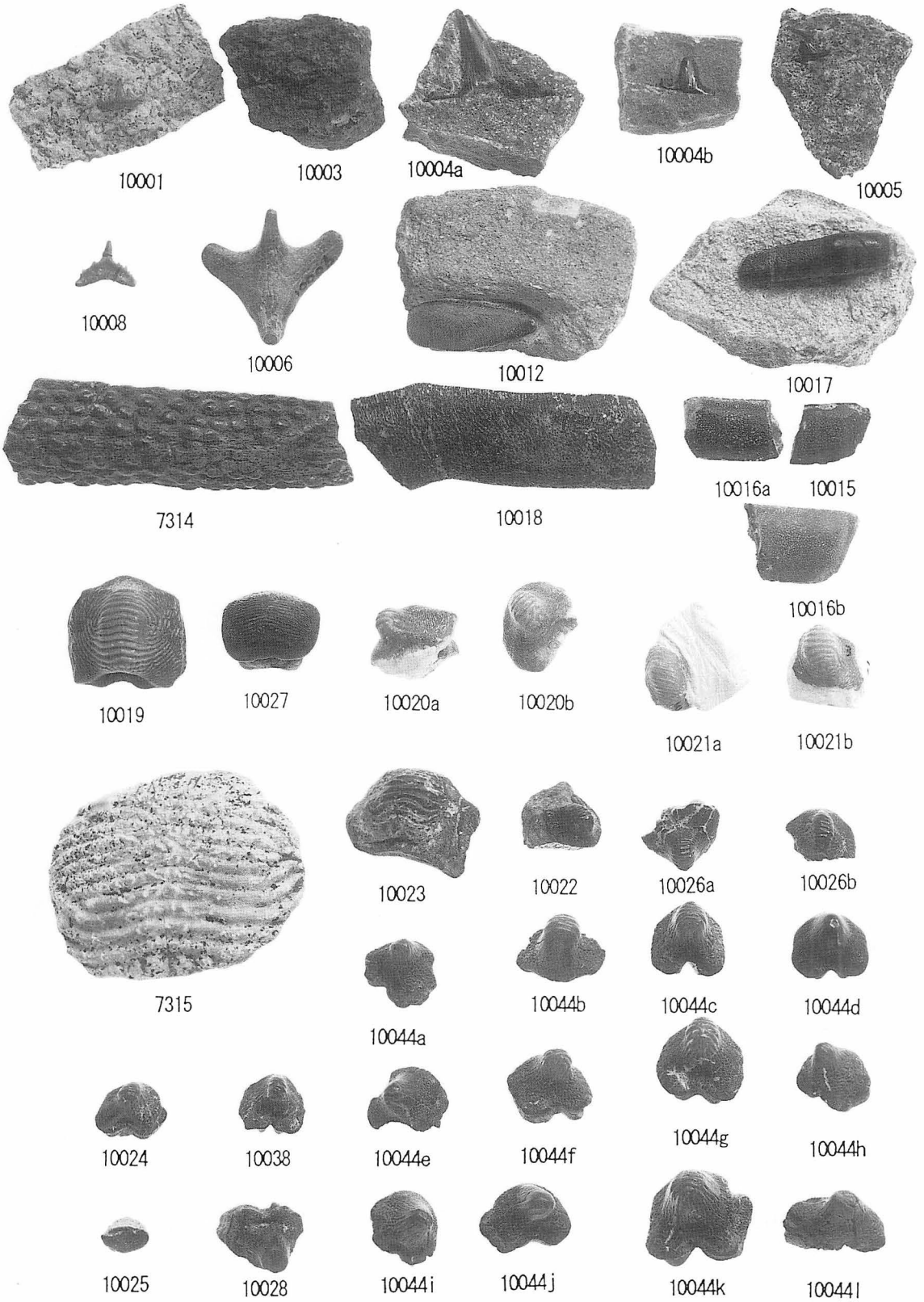
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Plate 6 (× 1.0)

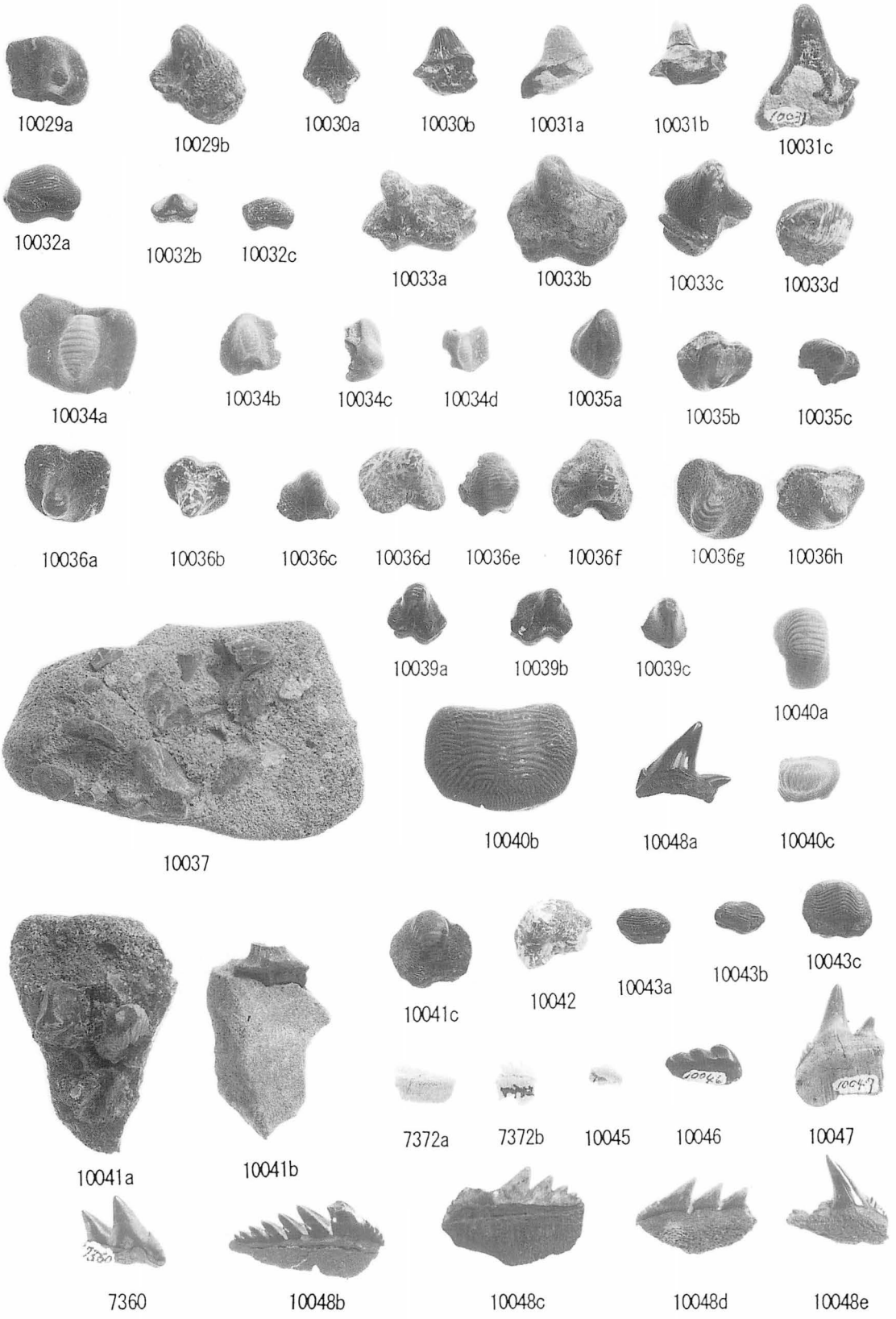
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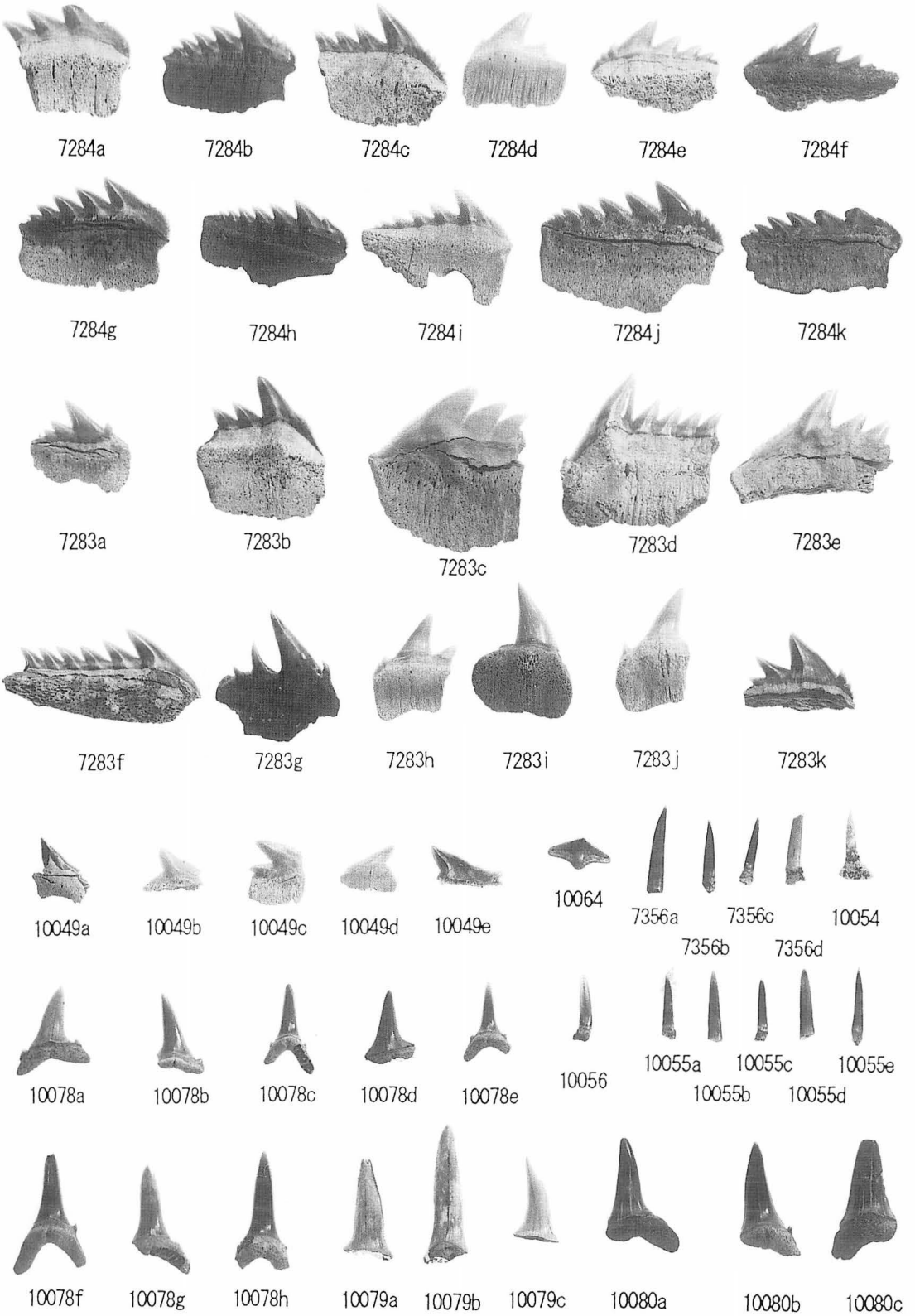
Plate 7 (× 1.0)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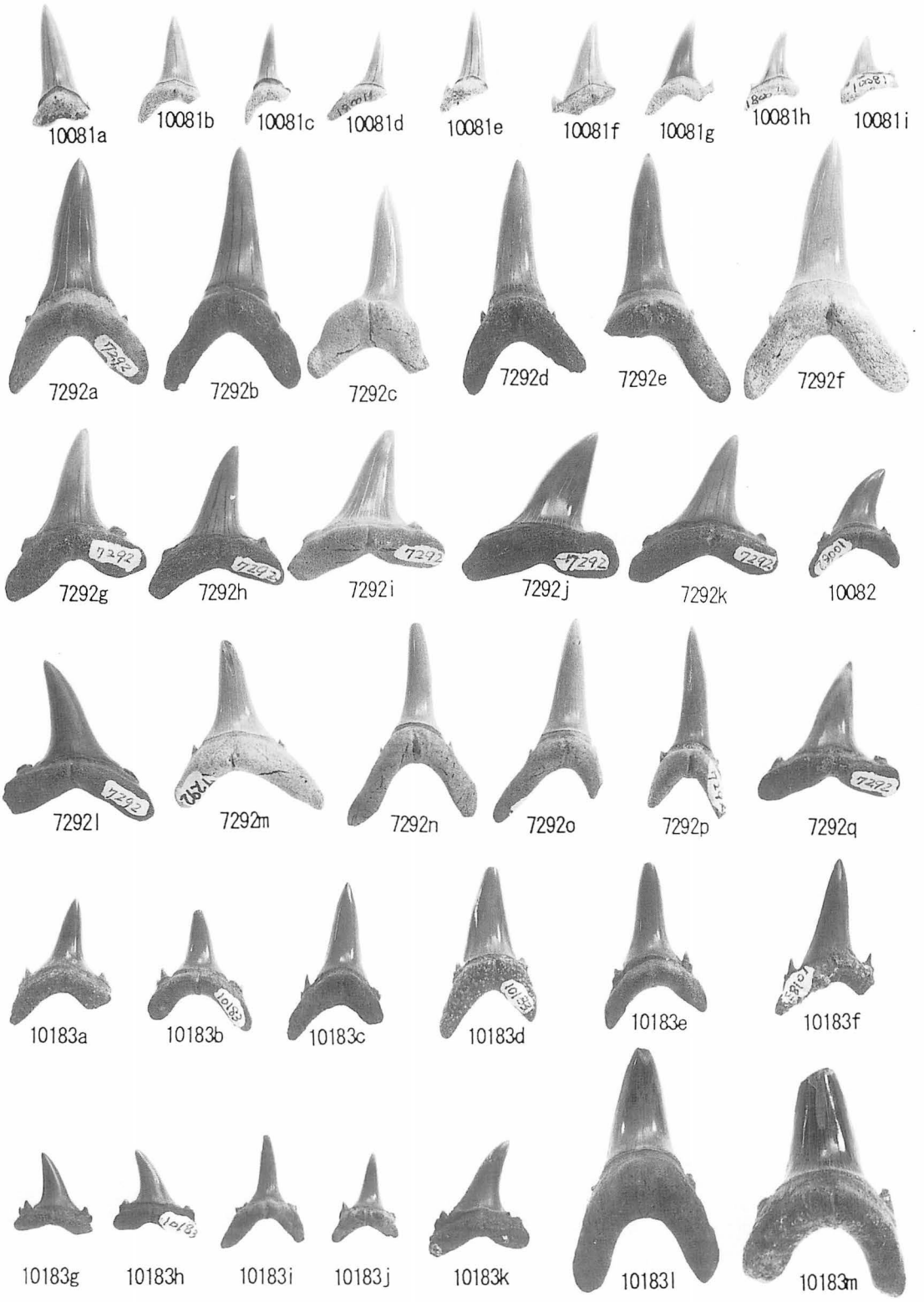
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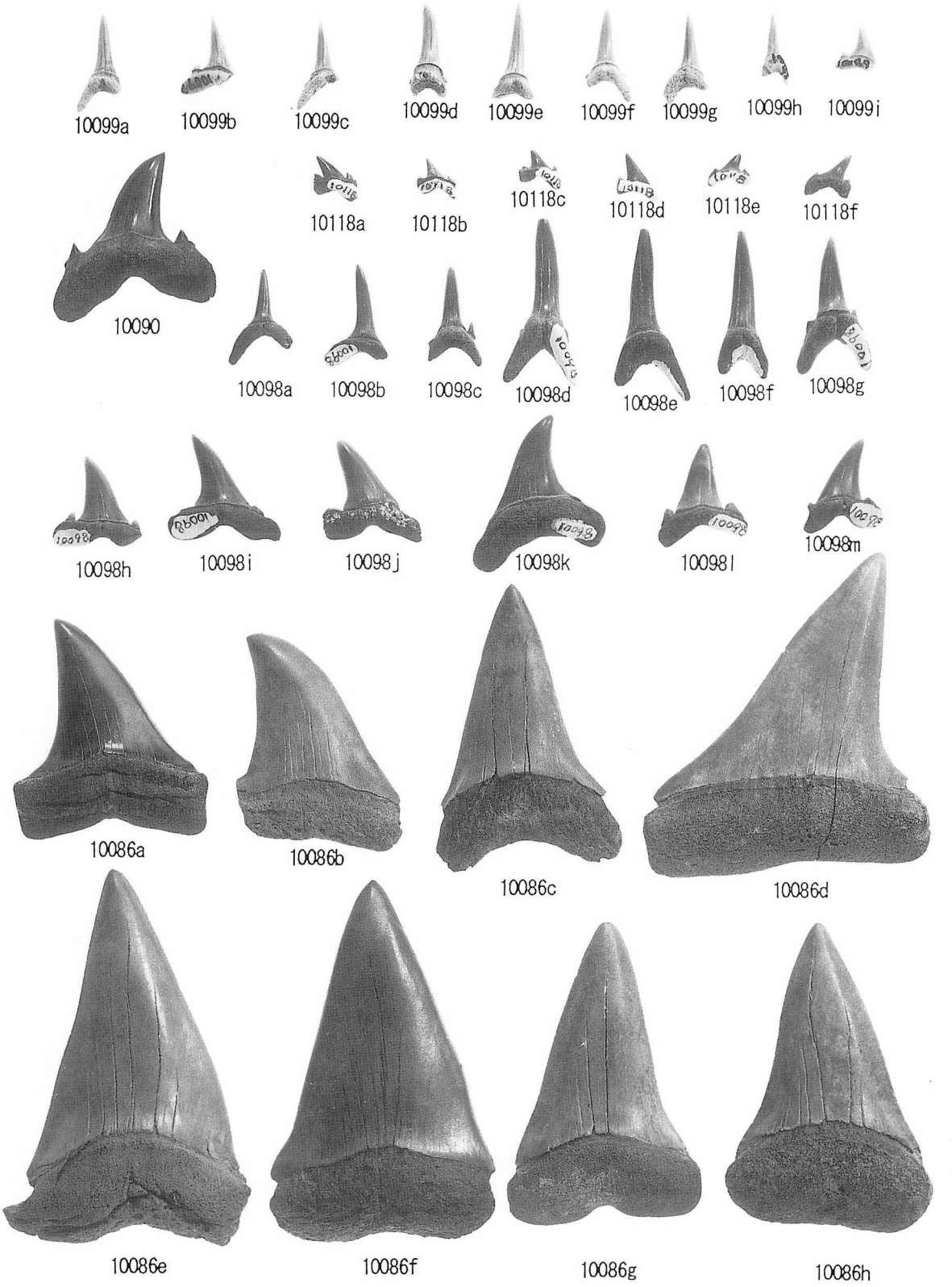
Plate 9 (× 1.0)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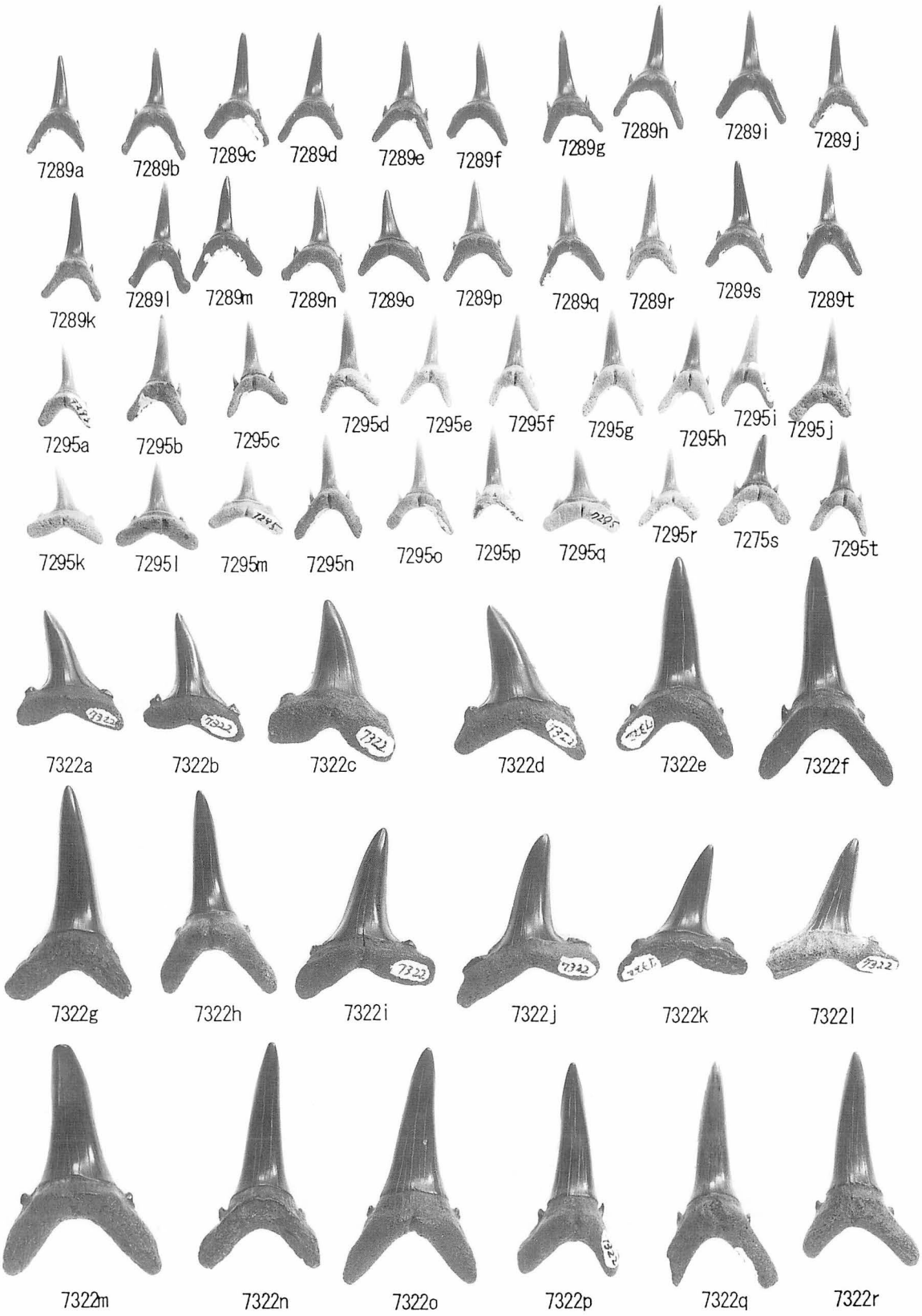
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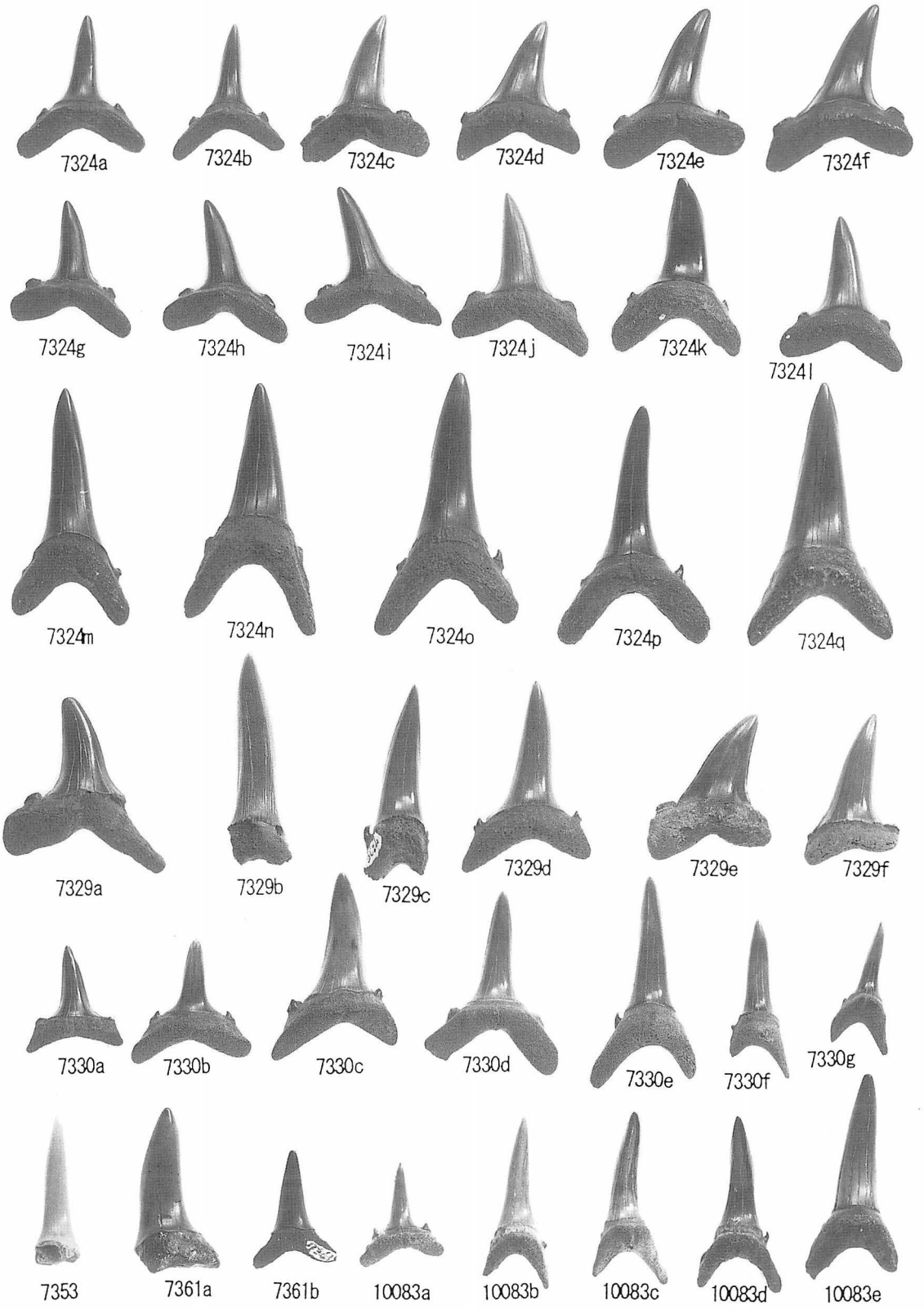
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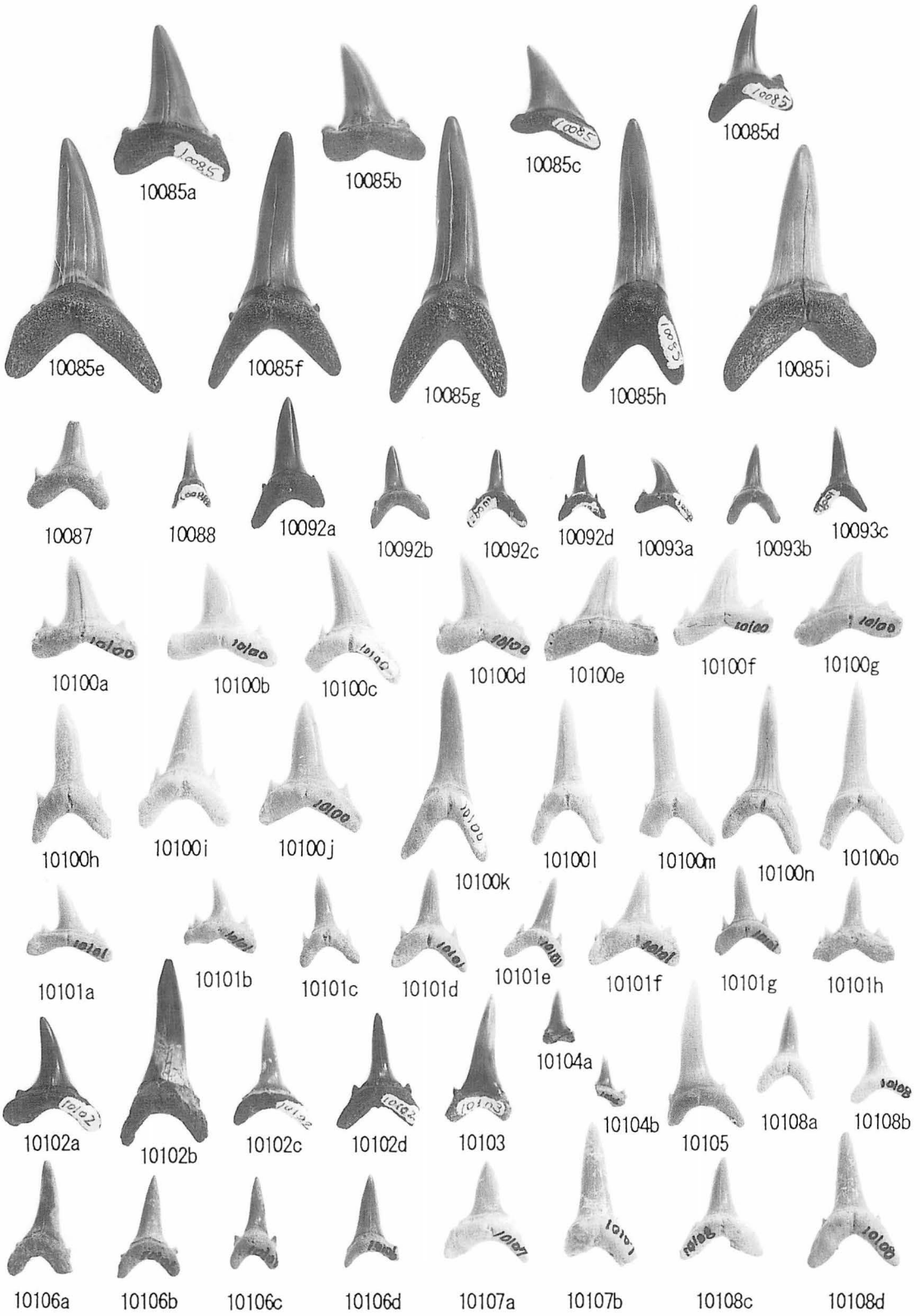
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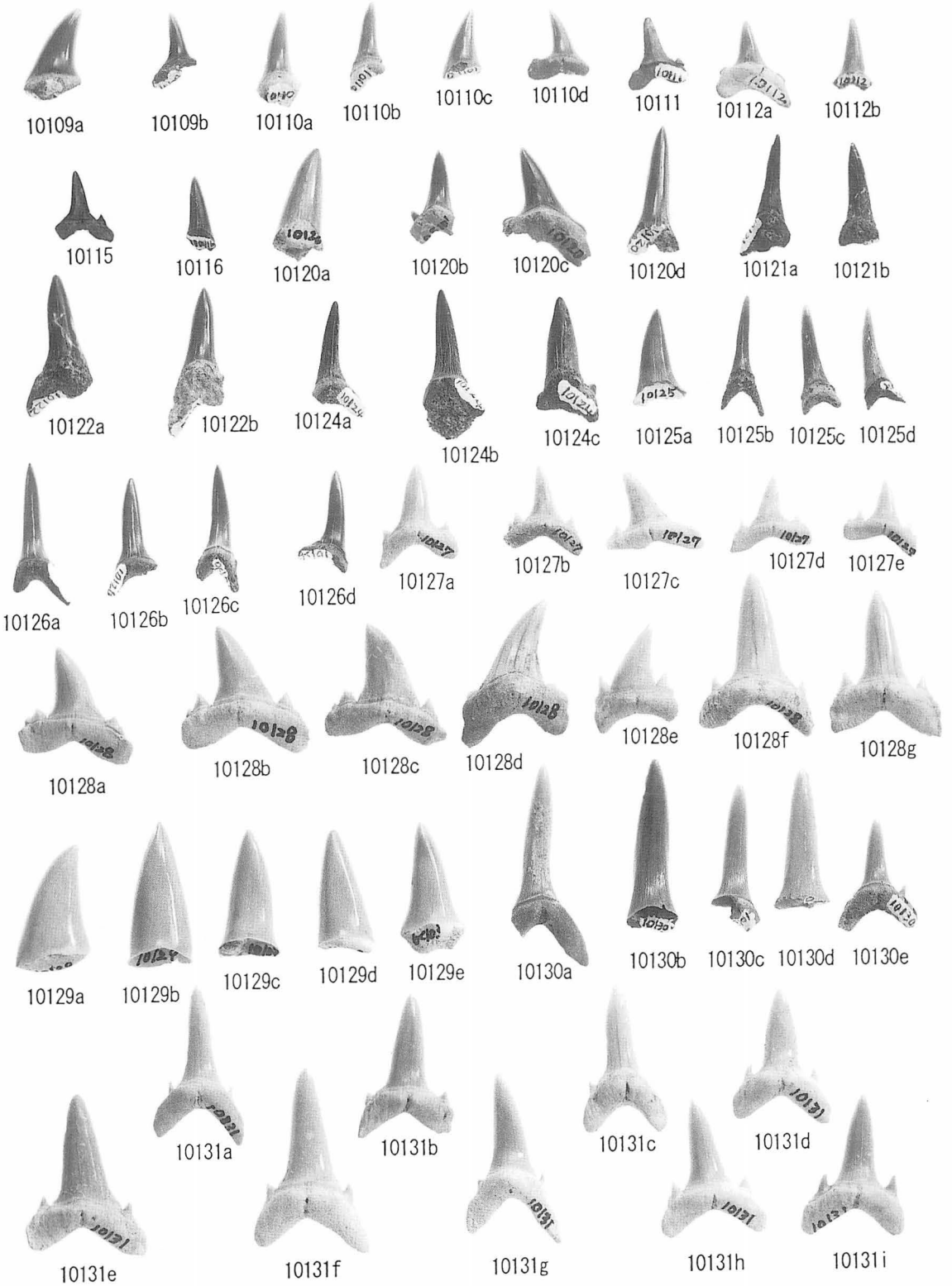
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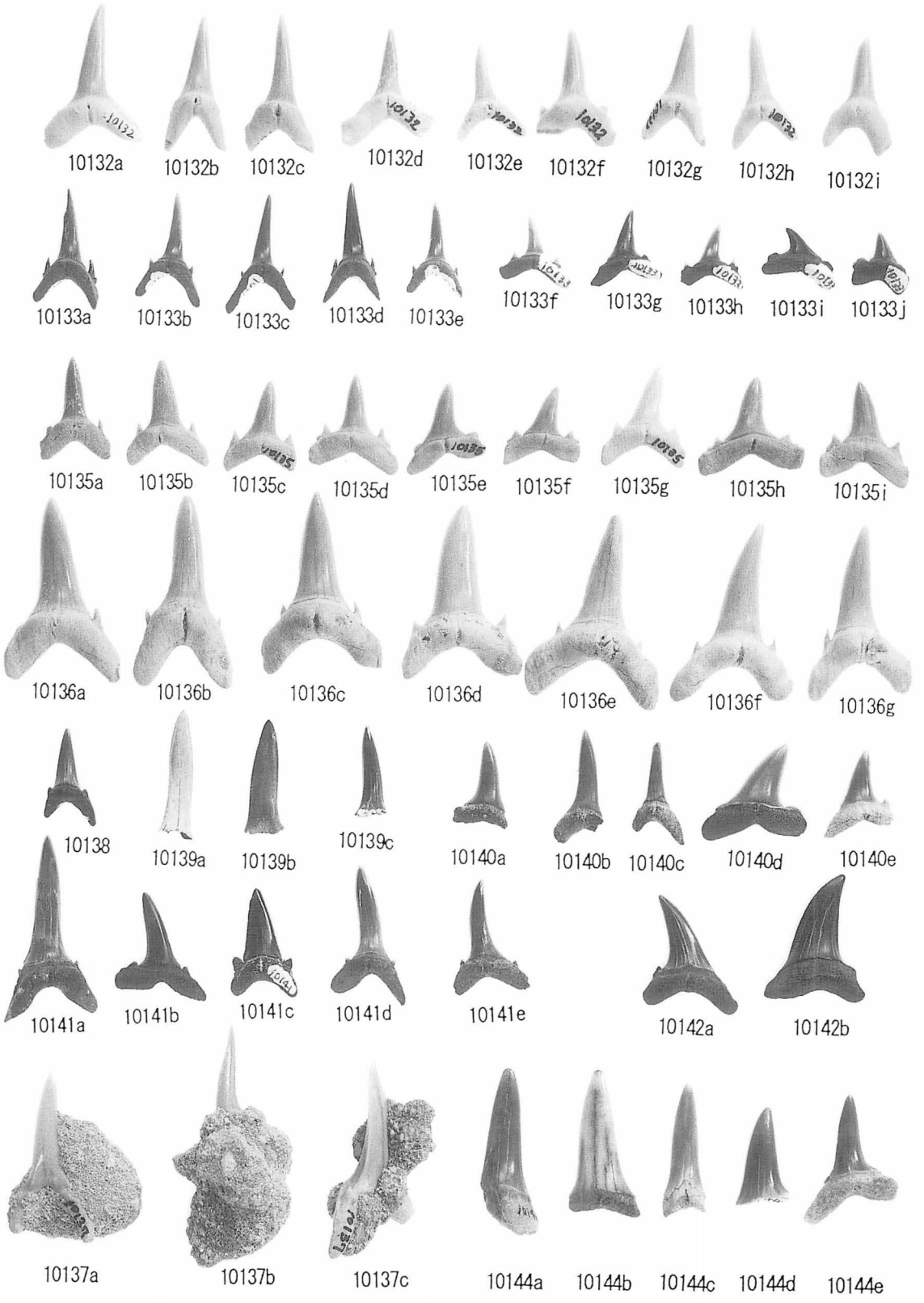
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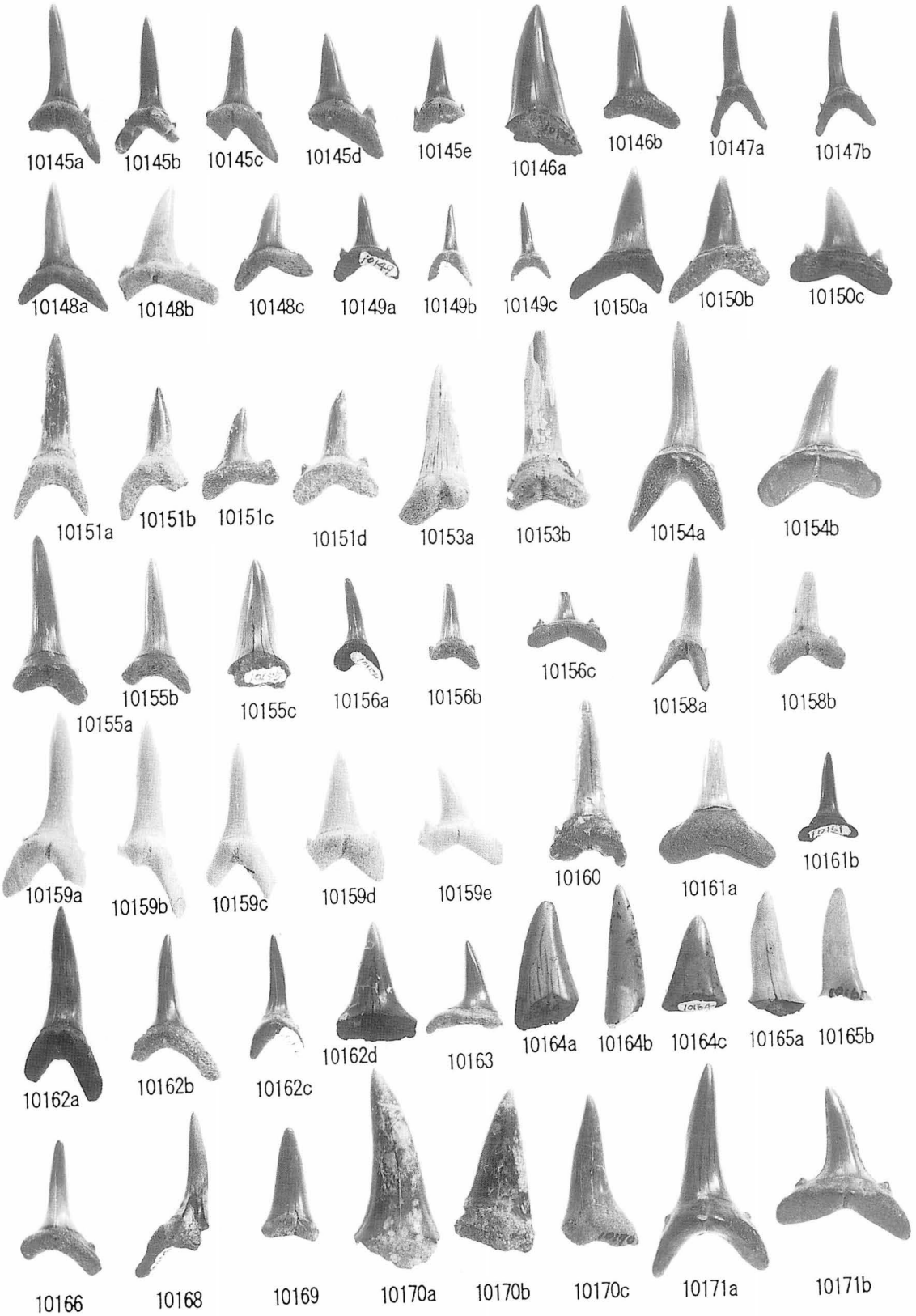
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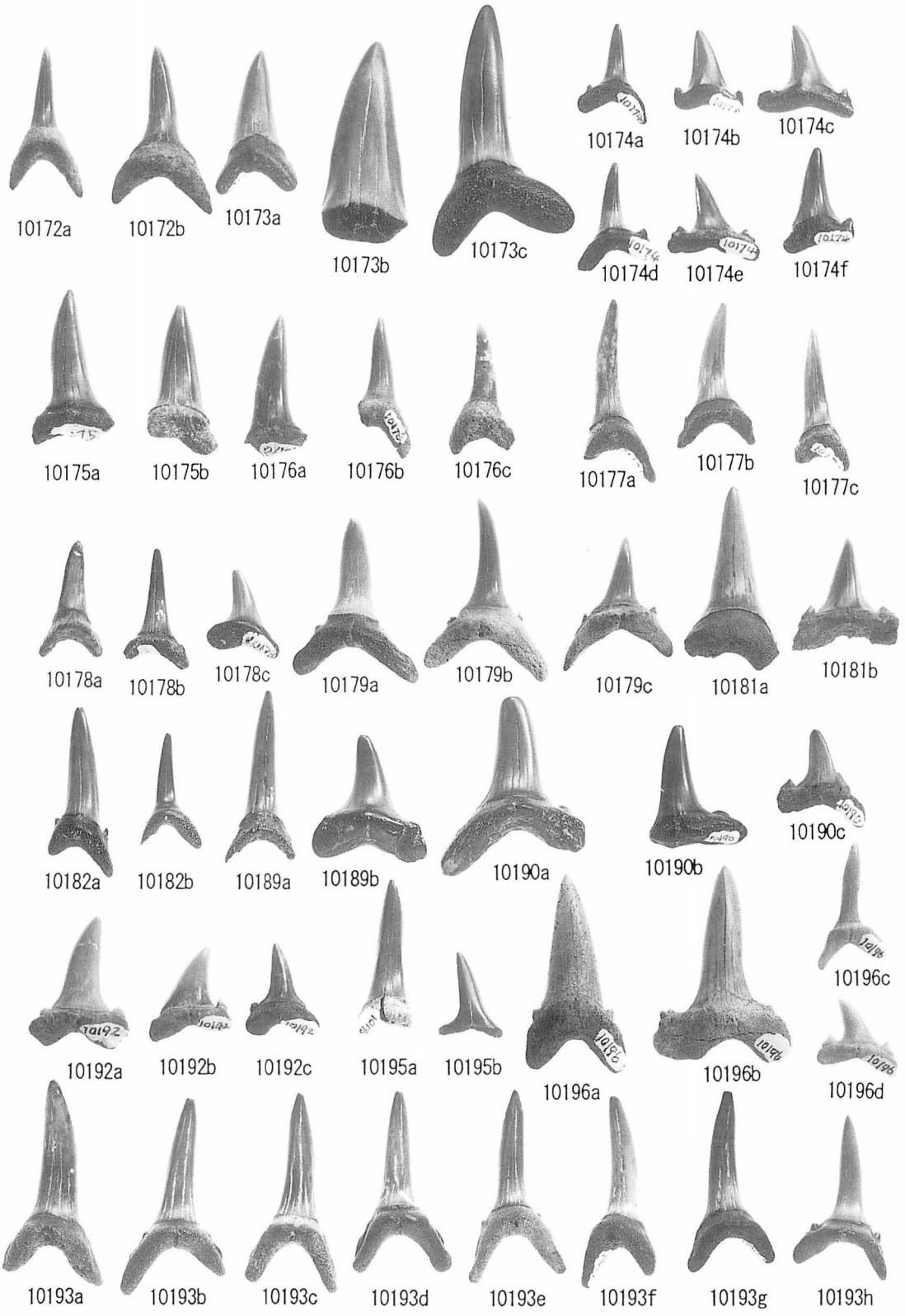
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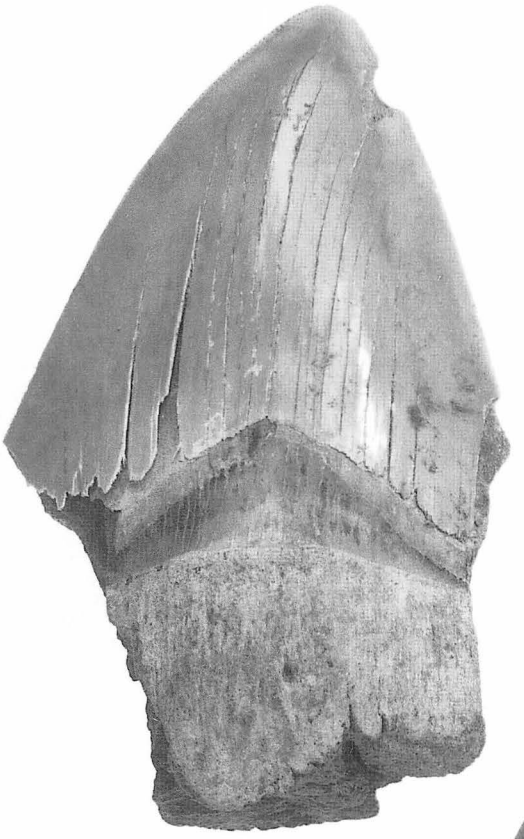

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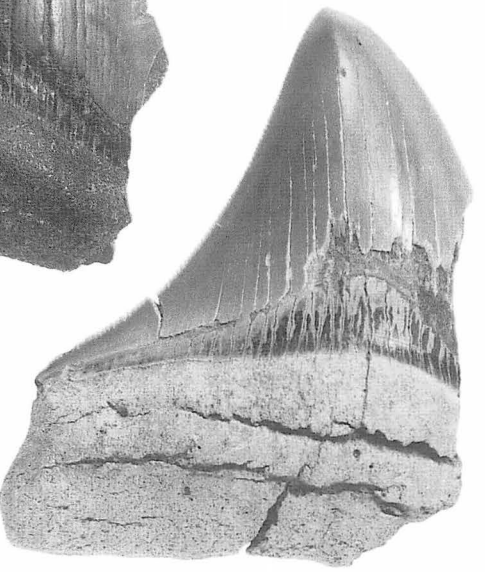

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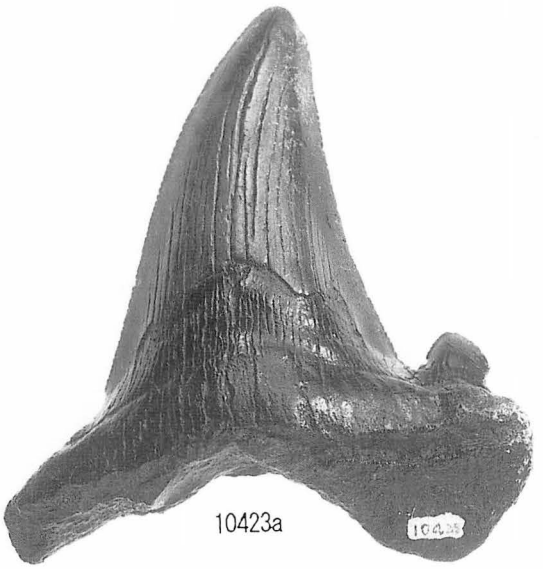

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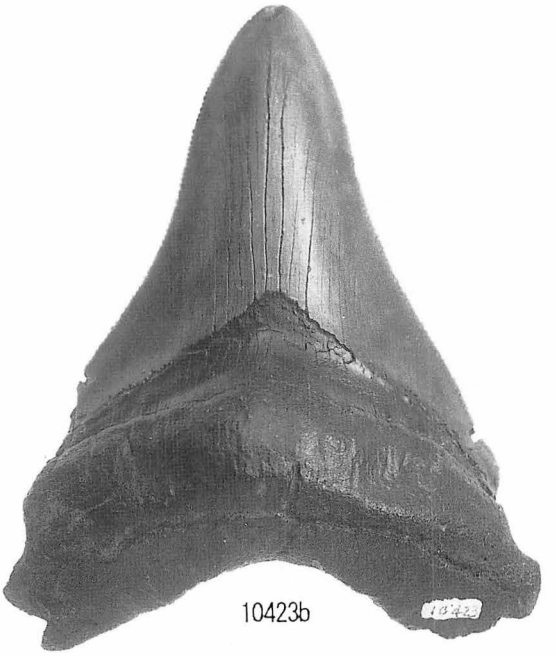

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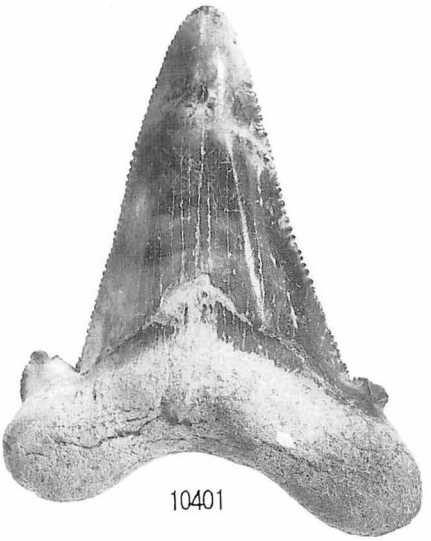

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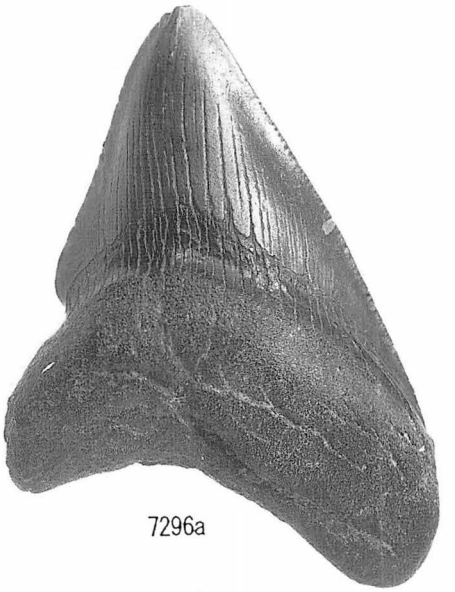

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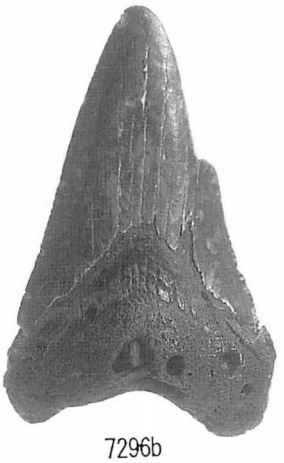

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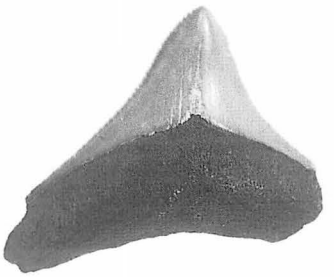

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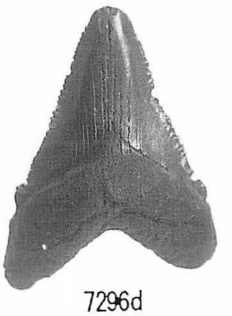

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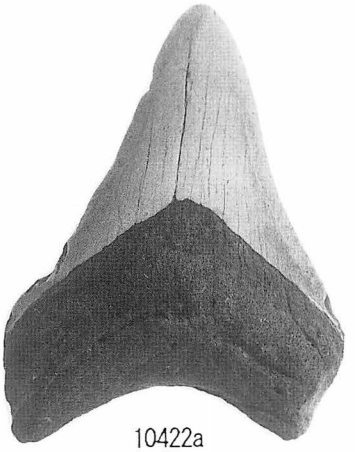

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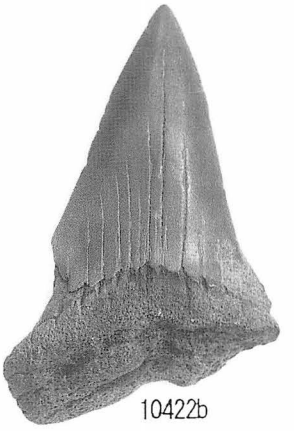

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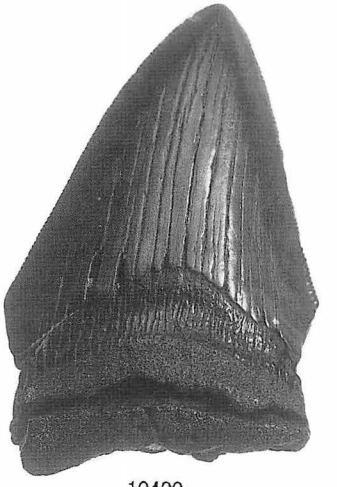

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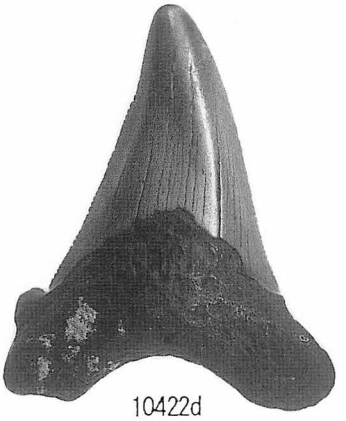

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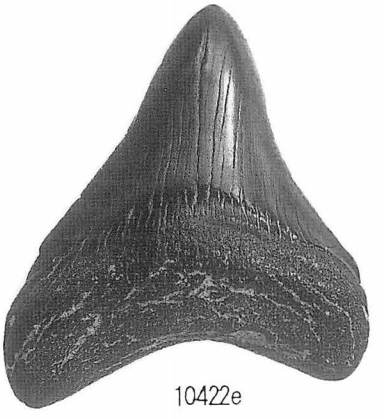

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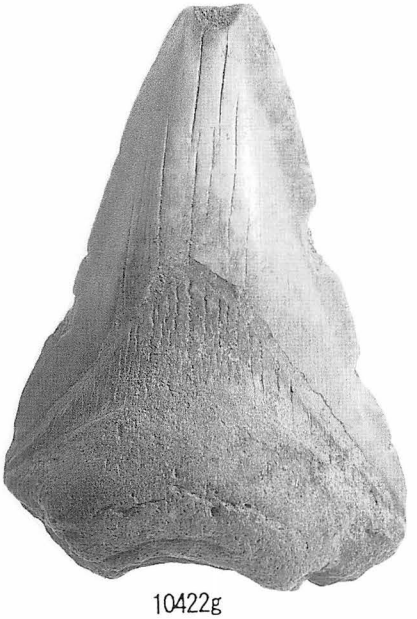

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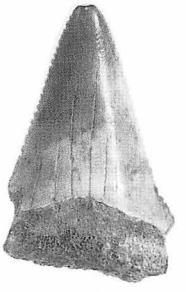

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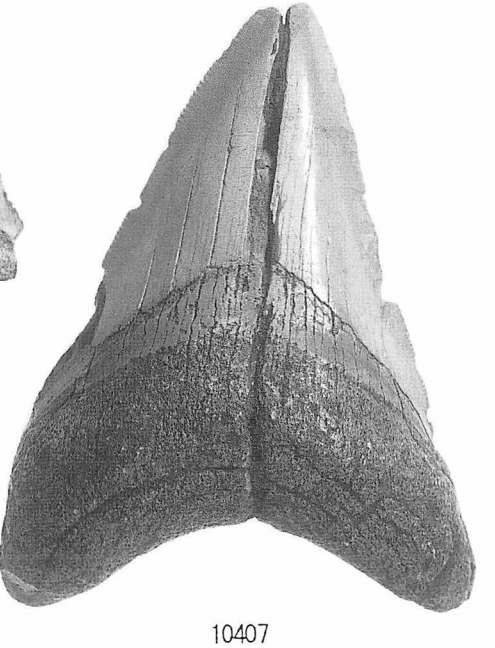
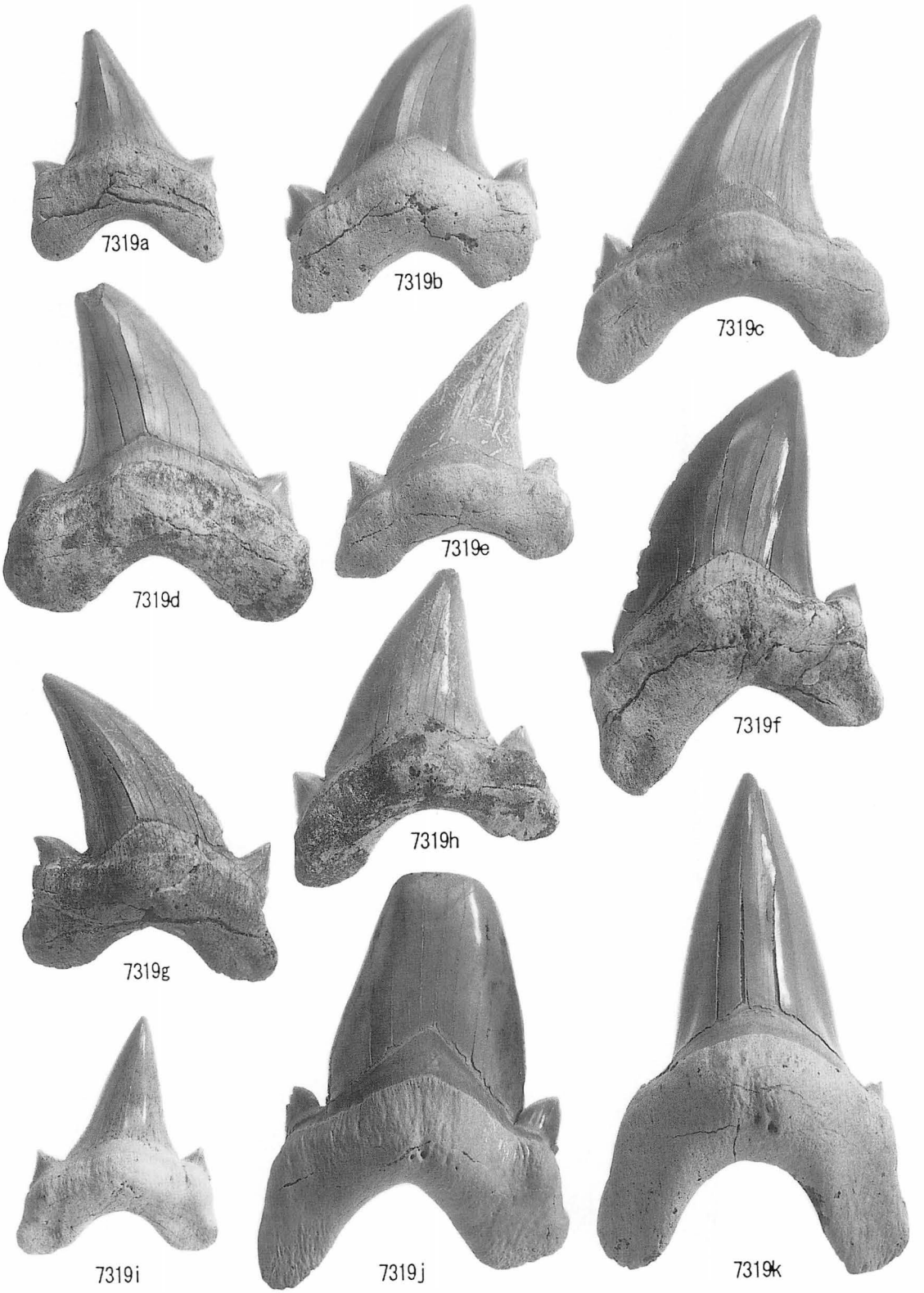


10407

Plate 20 (× 1.0)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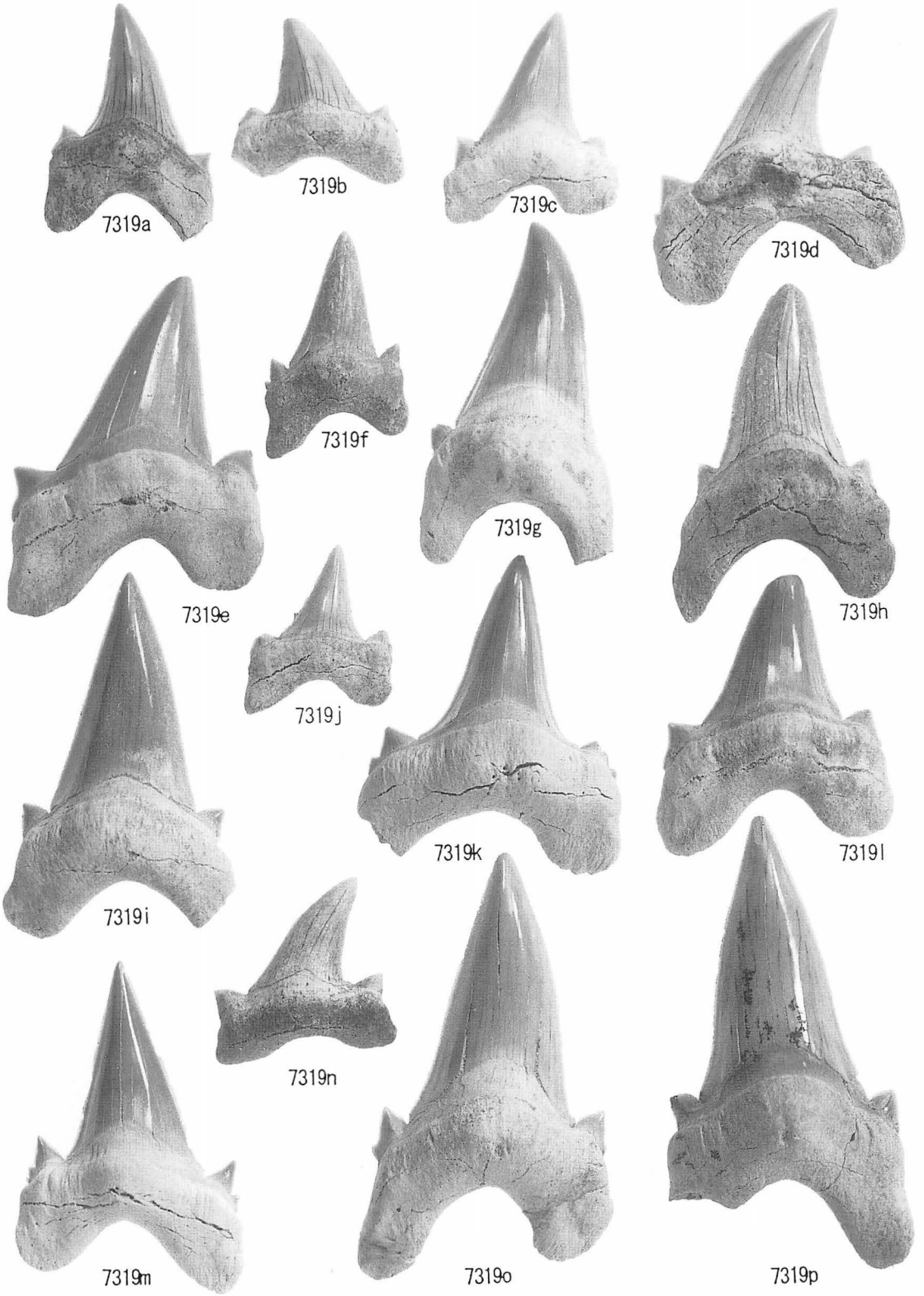
7319g
7319h
7319i
7319j
7319k

Plate 21 (× 1.0)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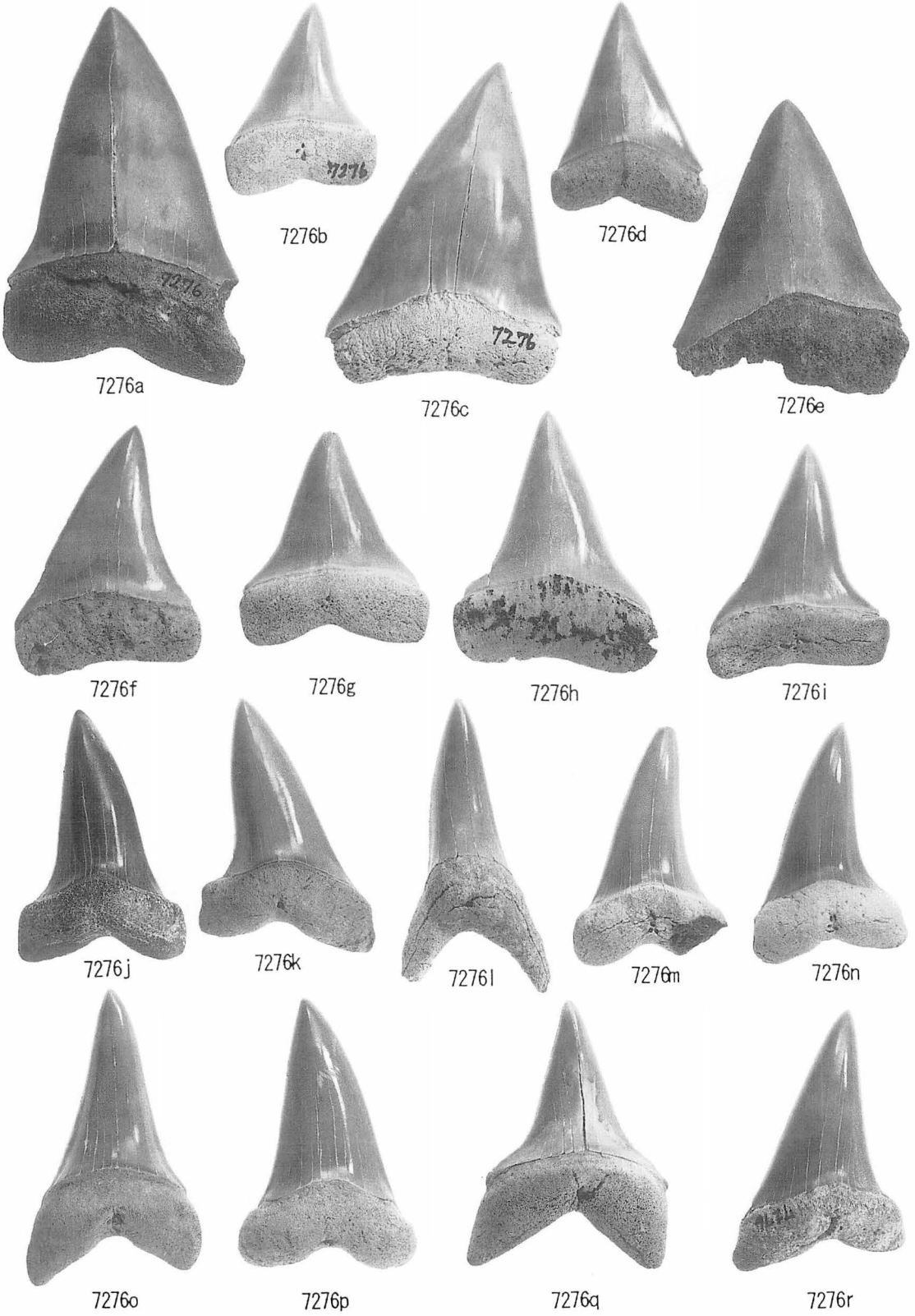
7319b
7319c
7319d
7319e
7319f
7319g
7319h
7319i
7319j
7319k
7319l
7319m
7319n
7319o
7319p

Plate 22 (× 1.0)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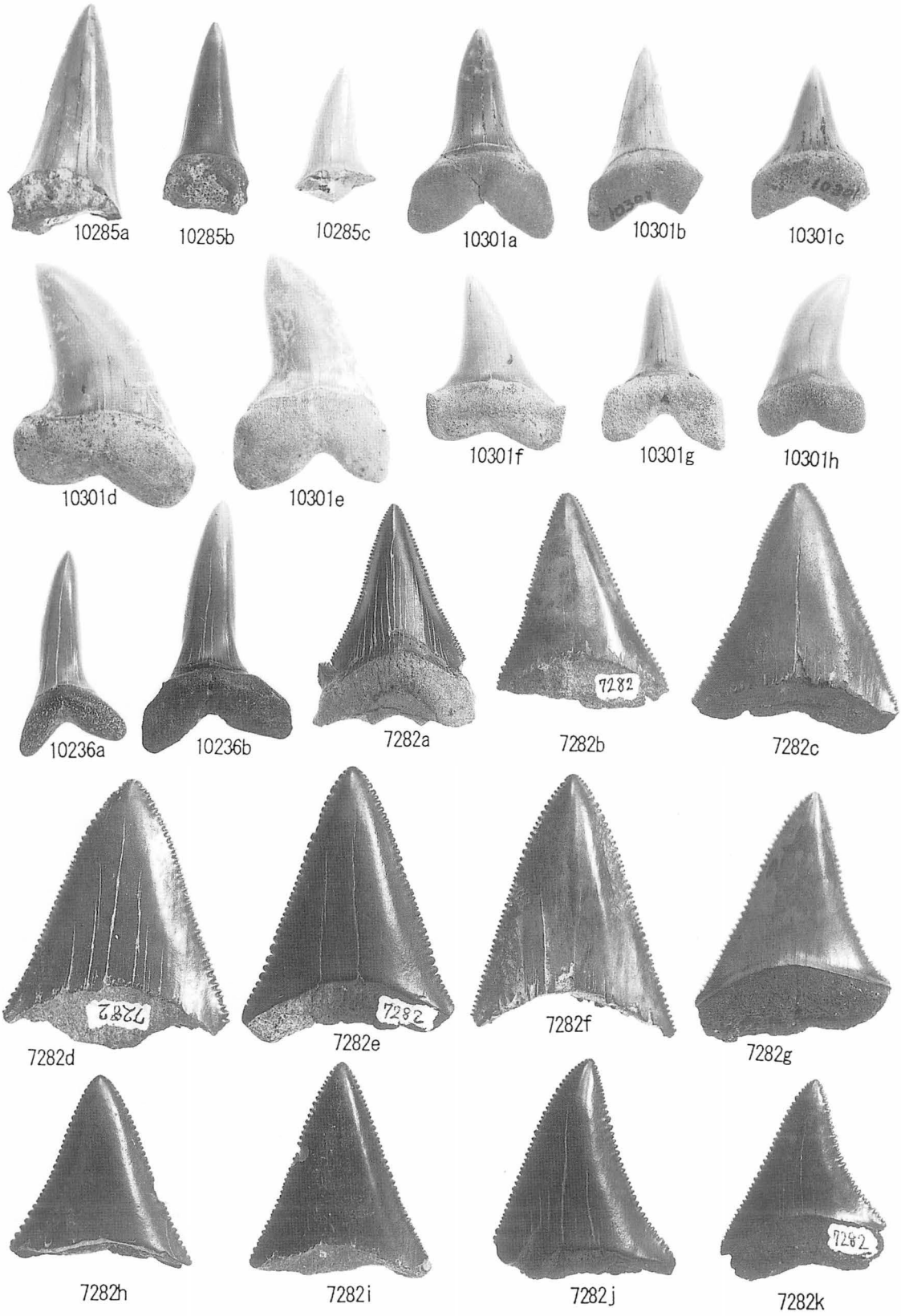
7276f
7276g
7276h
7276i
7276j
7276k
7276l
7276m
7276n
7276o
7276p
7276q
7276r

Plate 23 (× 1.0)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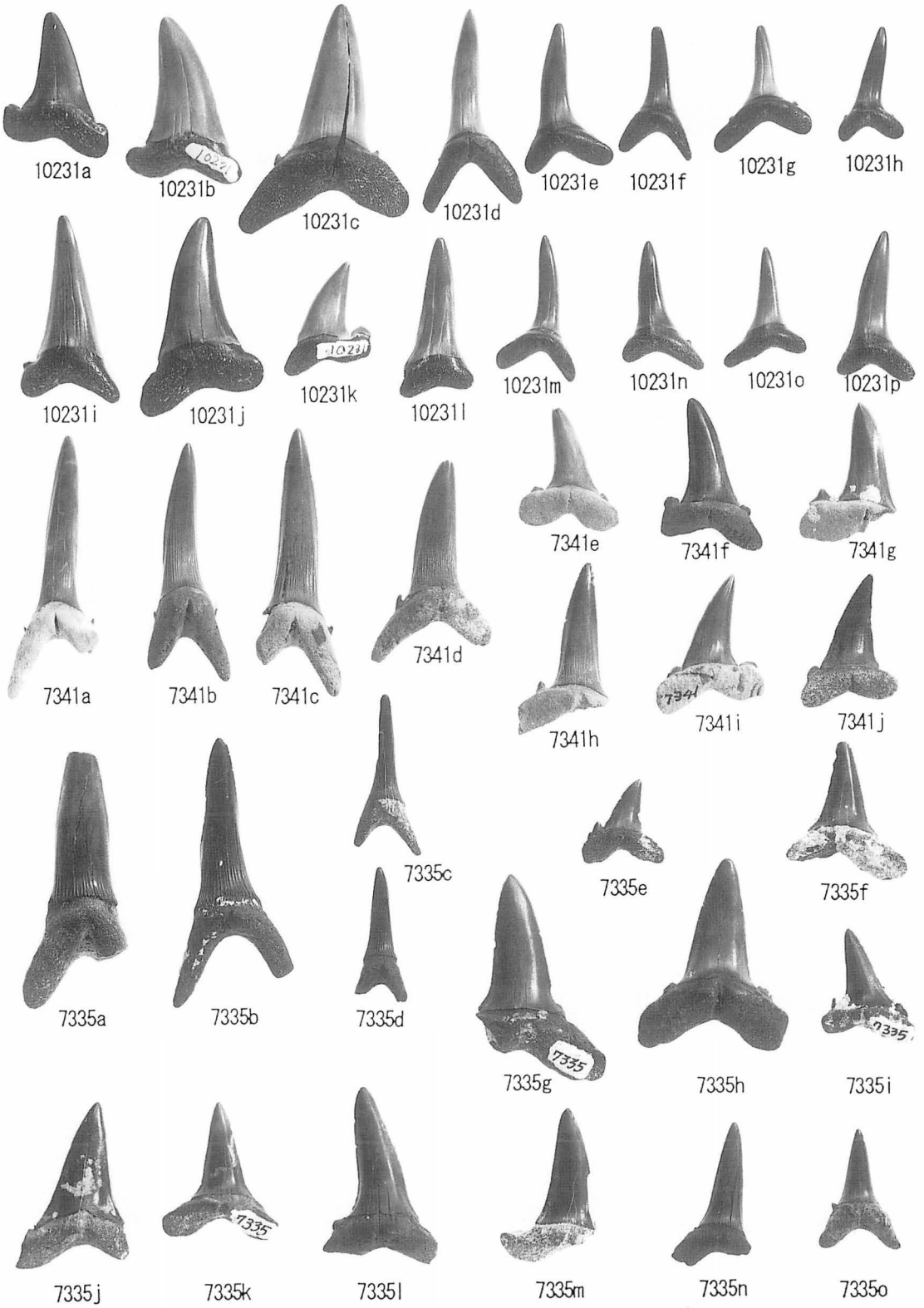
10301g
10301h
10236a
10236b
7282a
7282b
7282c
7282d
7282e
7282f
7282g
7282h
7282i
7282j
7282k

Plate 24 (× 1.0)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10231h
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10231j
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10231o
10231p
7341e
7341f
7341g
7341a
7341b
7341c
7341d
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7341i
7341j
7335c
7335e
7335f
7335a
7335b
7335d
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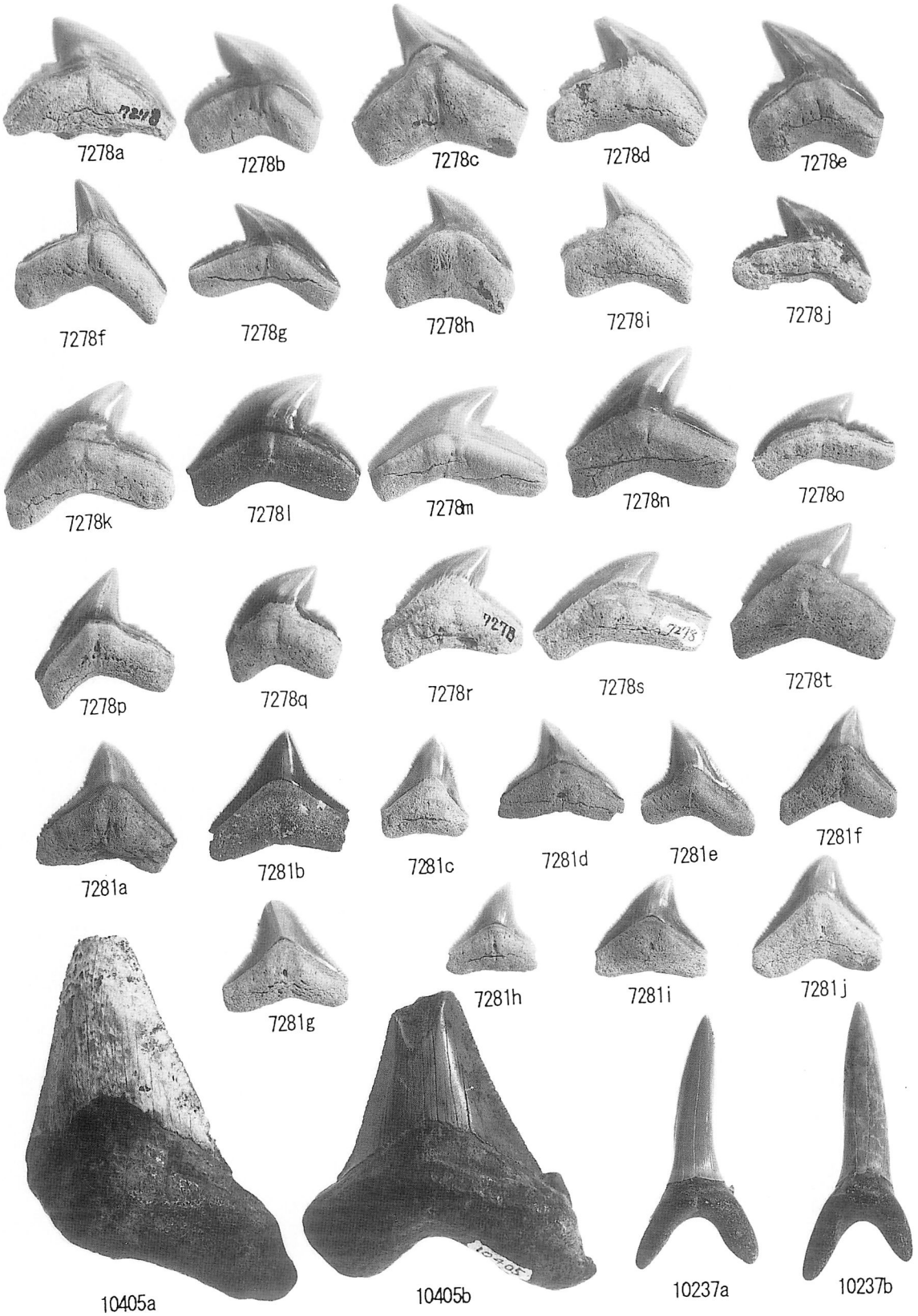
7335j
7335k
7335l
7335m
7335n
7335o

Plate 25 (× 1.0)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7278f
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7278h
7278i
7278j
7278k
7278l
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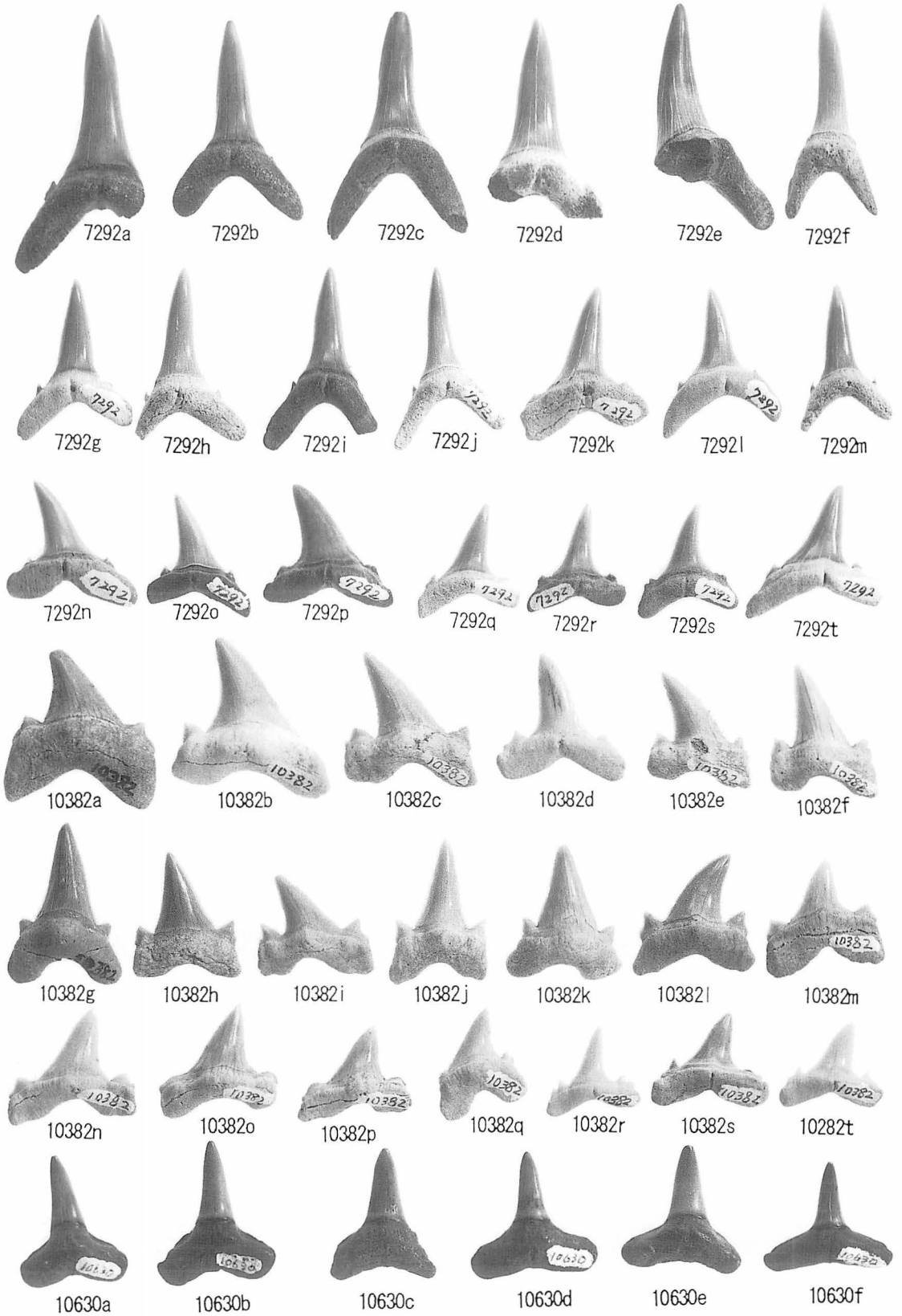
7278n
7278o
7278p
7278q
7278r
7278s
7278t
7281a
7281b
7281c
7281d
7281e
7281f
7281g
7281h
7281i
7281j
10405a
10405b
10237a
10237b

Plate 26 (× 1.0)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7292b
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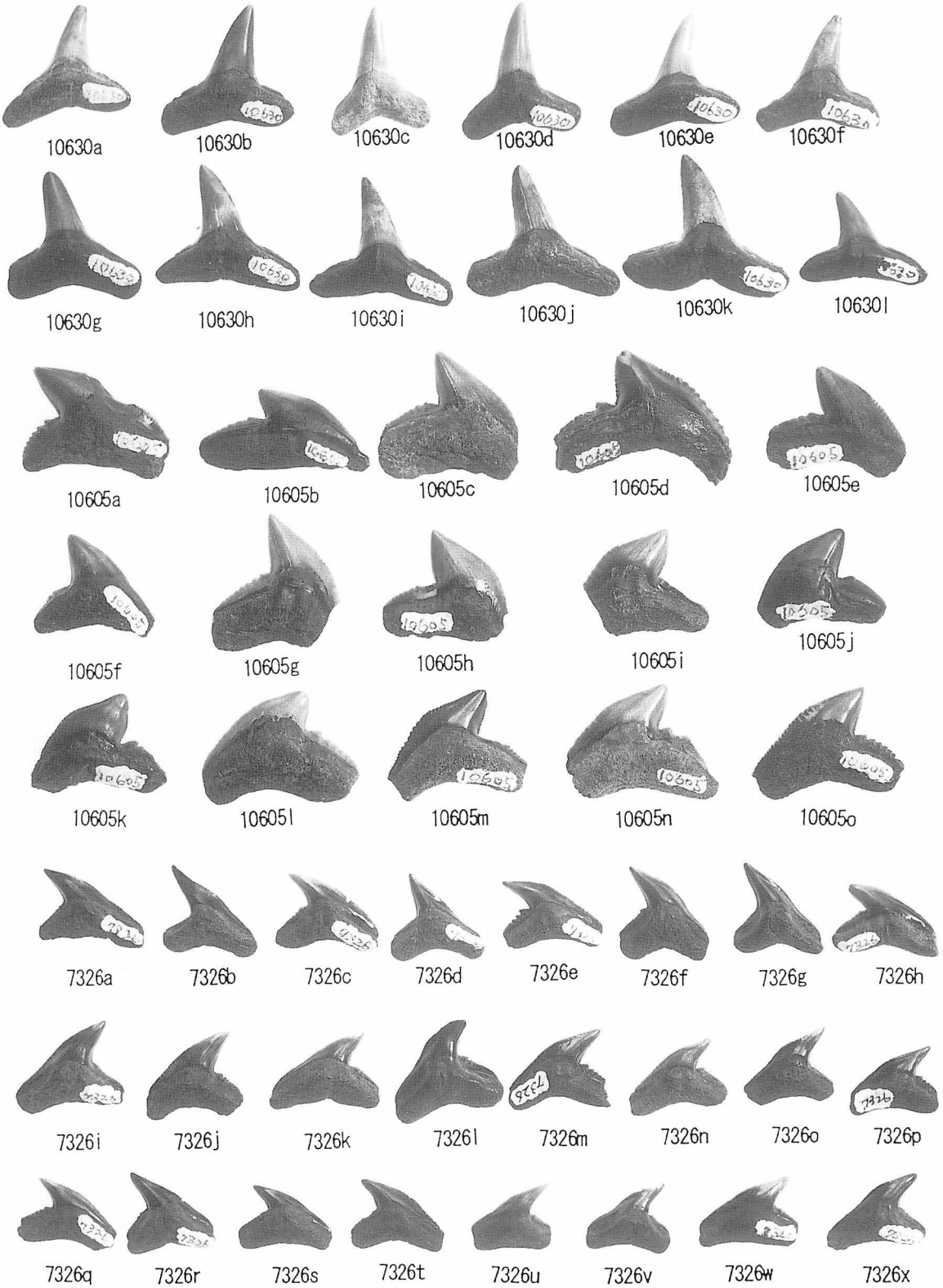
7292f
7292g
7292h
7292i
7292j
7292k
7292l
7292m
7292n
7292o
7292p
7292q
7292r
7292s
7292t
10382a
10382b
10382c
10382d
10382e
10382f
10382g
10382h
10382i
10382j
10382k
10382l
10382m
10382n
10382o
10382p
10382q
10382r
10382s
10282t
10630a
10630b
10630c
10630d
10630e
10630f

Plate 27 (× 1.0)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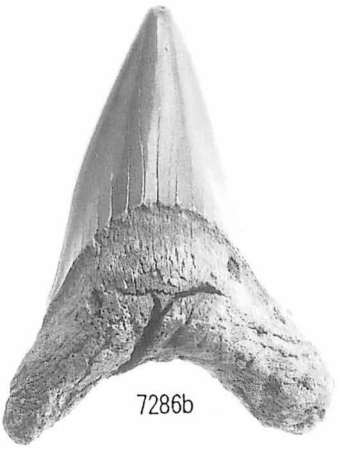
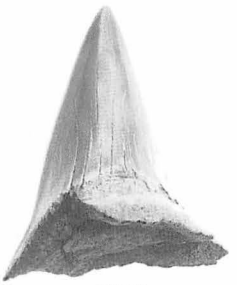
10630g
10630h
10630i
10630j
10630k
10630l
10605a
10605b
10605c
10605d
10605e
10605f
10605g
10605h
10605i
10605j
10605k
10605l
10605m
10605n
10605o
7326a
7326b
7326c
7326d
7326e
7326f
7326g
7326h
7326i
7326j
7326k
7326l
7326m
7326n
7326o
7326p
7326q
7326r
7326s
7326t
7326u
7326v
7326w
7326x

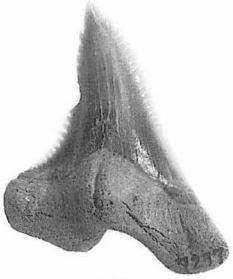
Plate 28 (× 1.0)

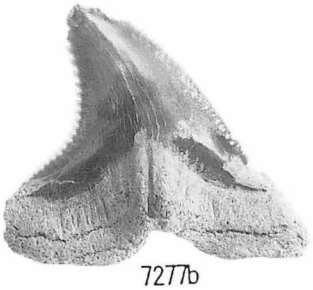
7286a


7286b


7286c

7277d


7277a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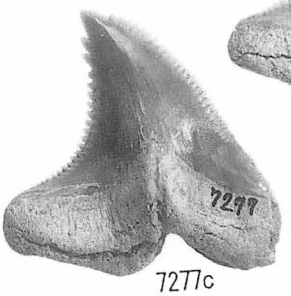
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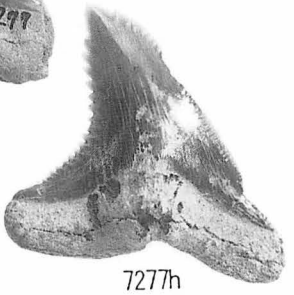
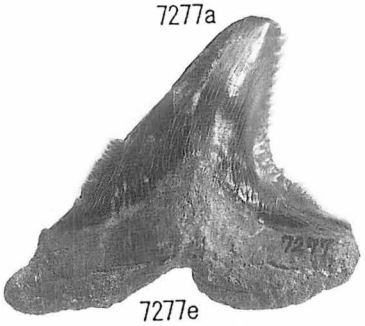

7277h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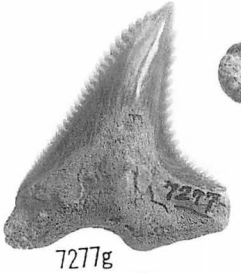
7277f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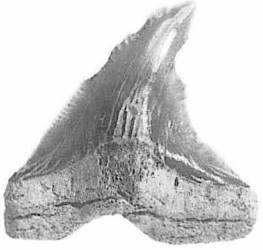
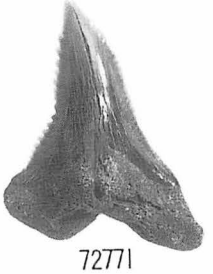

7277i

7277j

7277k


7277l

7277m

7277n

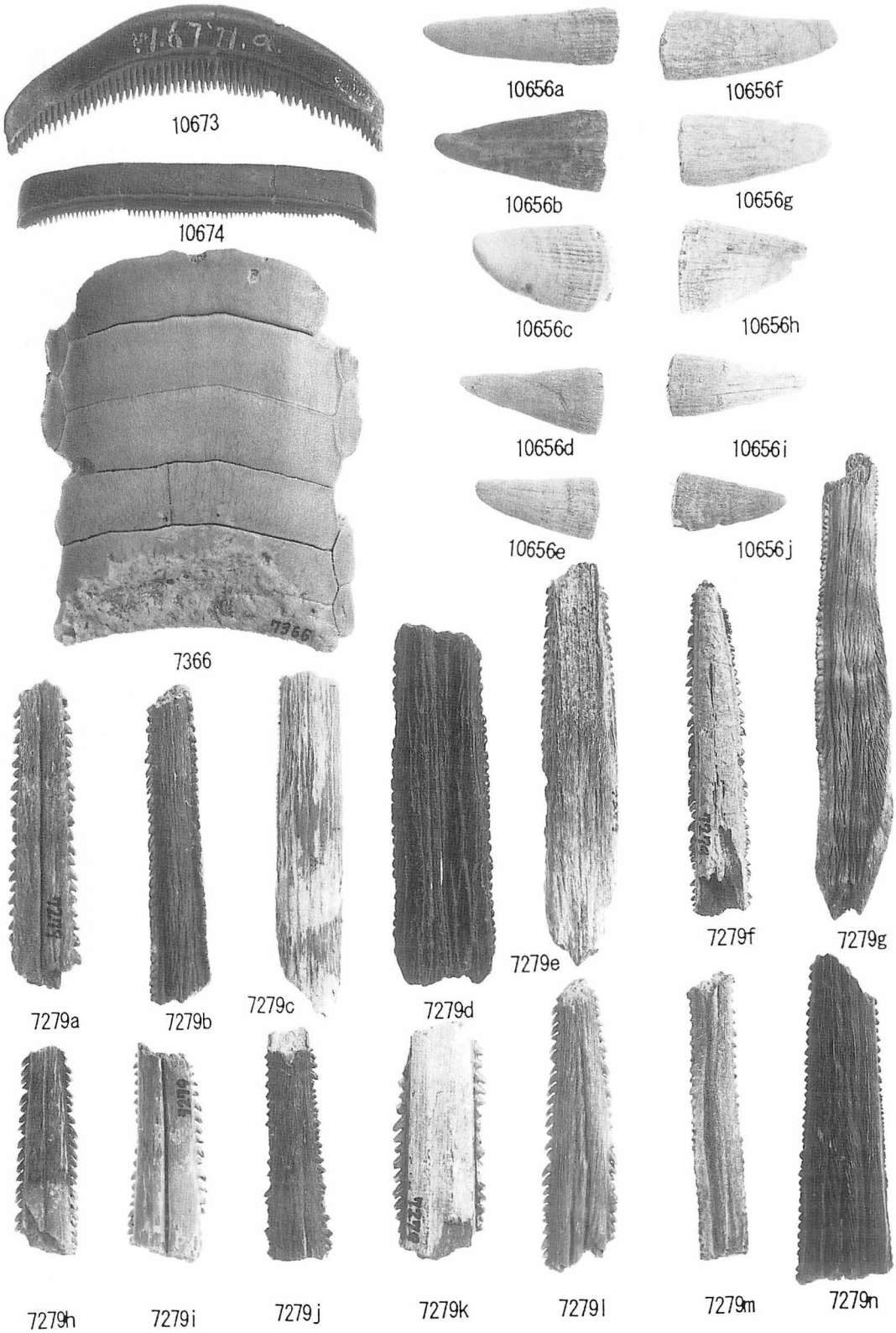
7277o

7277p

7277q

7277r

Plate 29 (× 1.0)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10656a
10656f
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10656c
10656h
10656d
10656i
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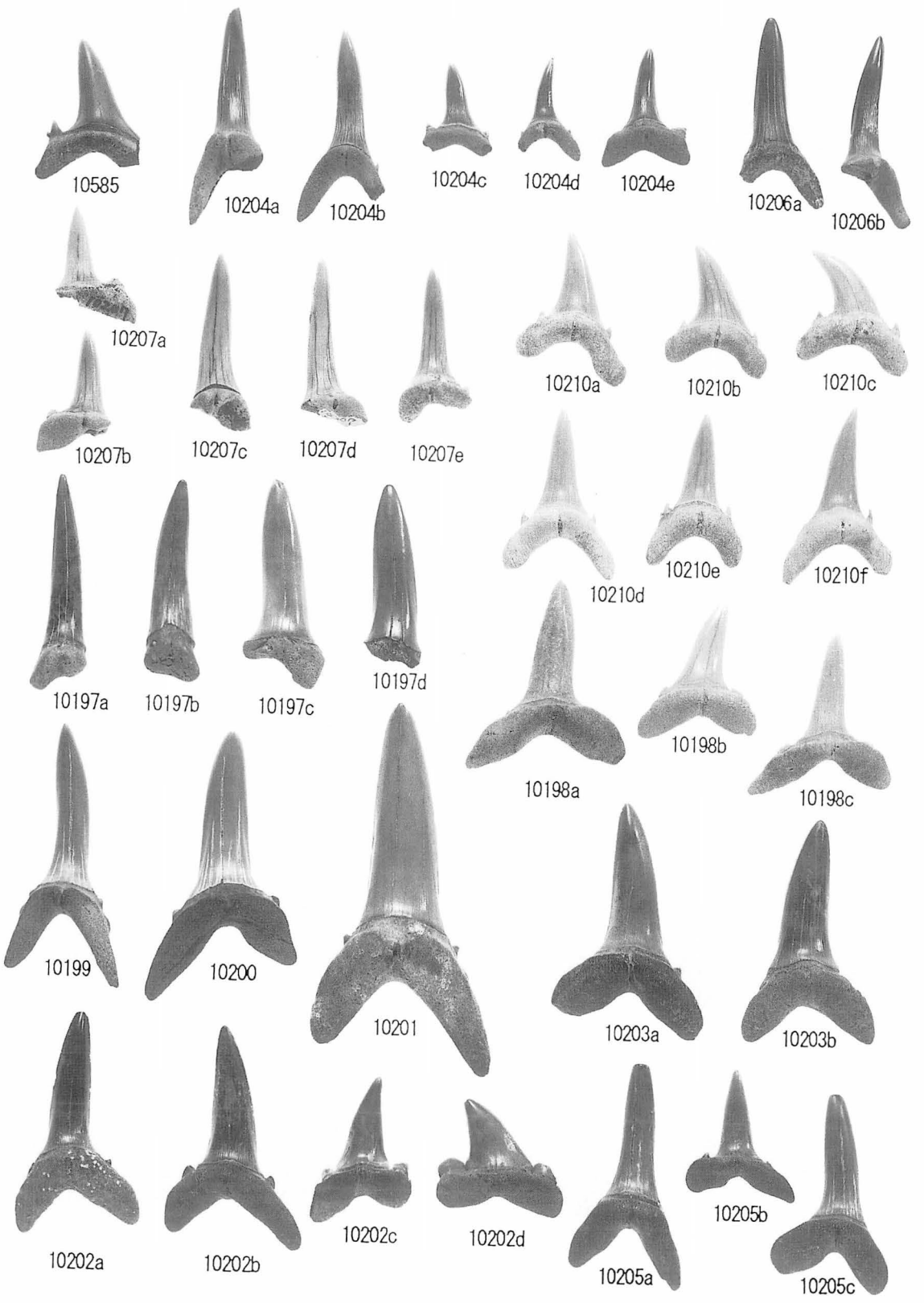
10656j
7279a
7279b
7279c
7279d
7279e
7279f
7279g
7279h
7279i
7279j
7279k
7279l
7279m
7279n

Plate 30 (× 1.0)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10206b
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10207c
10207d
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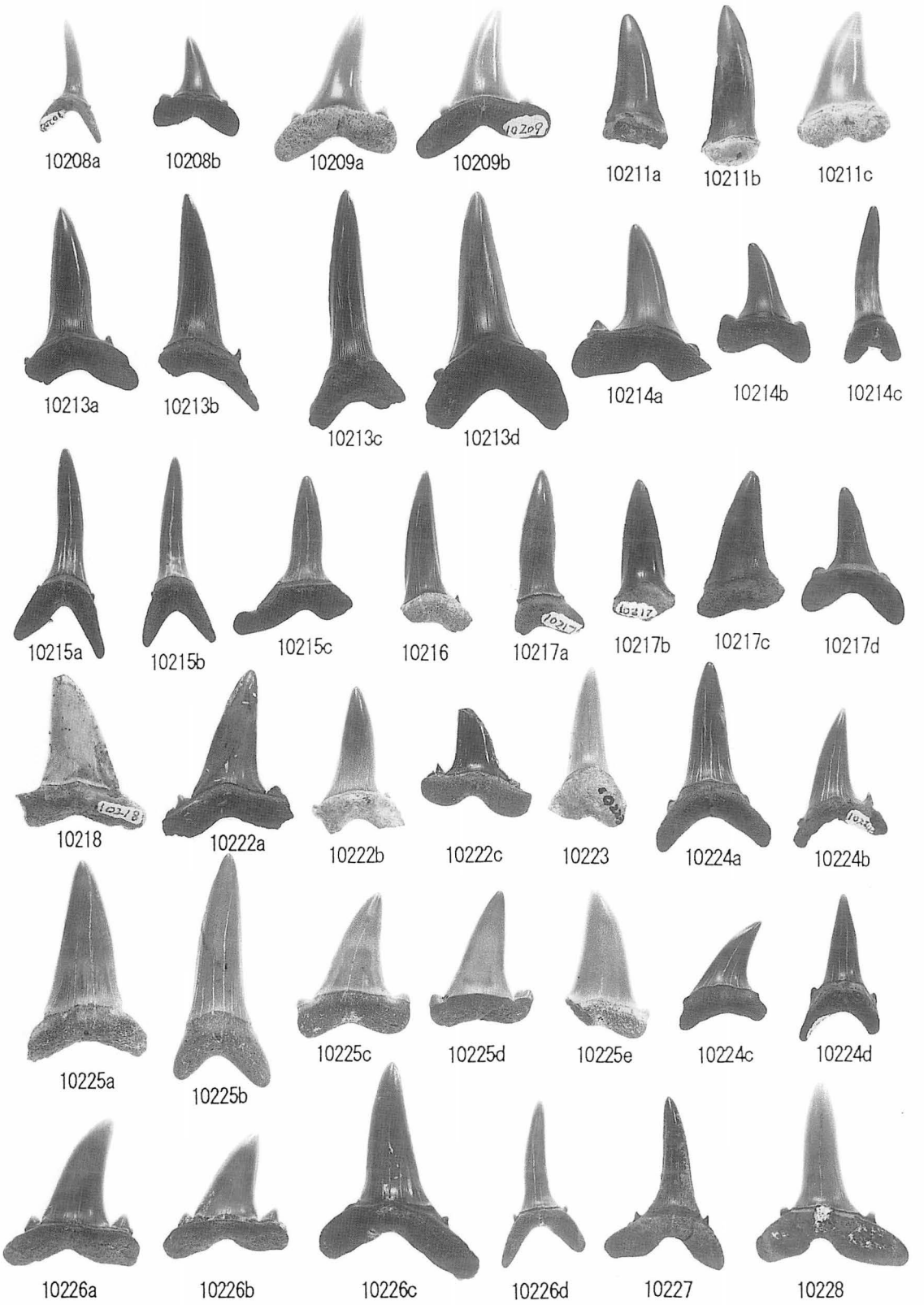
10210c
10210d
10210e
10210f
10197a
10197b
10197c
10197d
10198a
10198b
10198c
10199
10200
10201
10203a
10203b
10202a
10202b
10202c
10202d
10205a
10205b
10205c

Plate 31 (× 1.0)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10213a
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10213d
10214a
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10215a
10215b
10215c
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10217a
10217b
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10217d
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10224a
10224b
10225a
10225b
10225c
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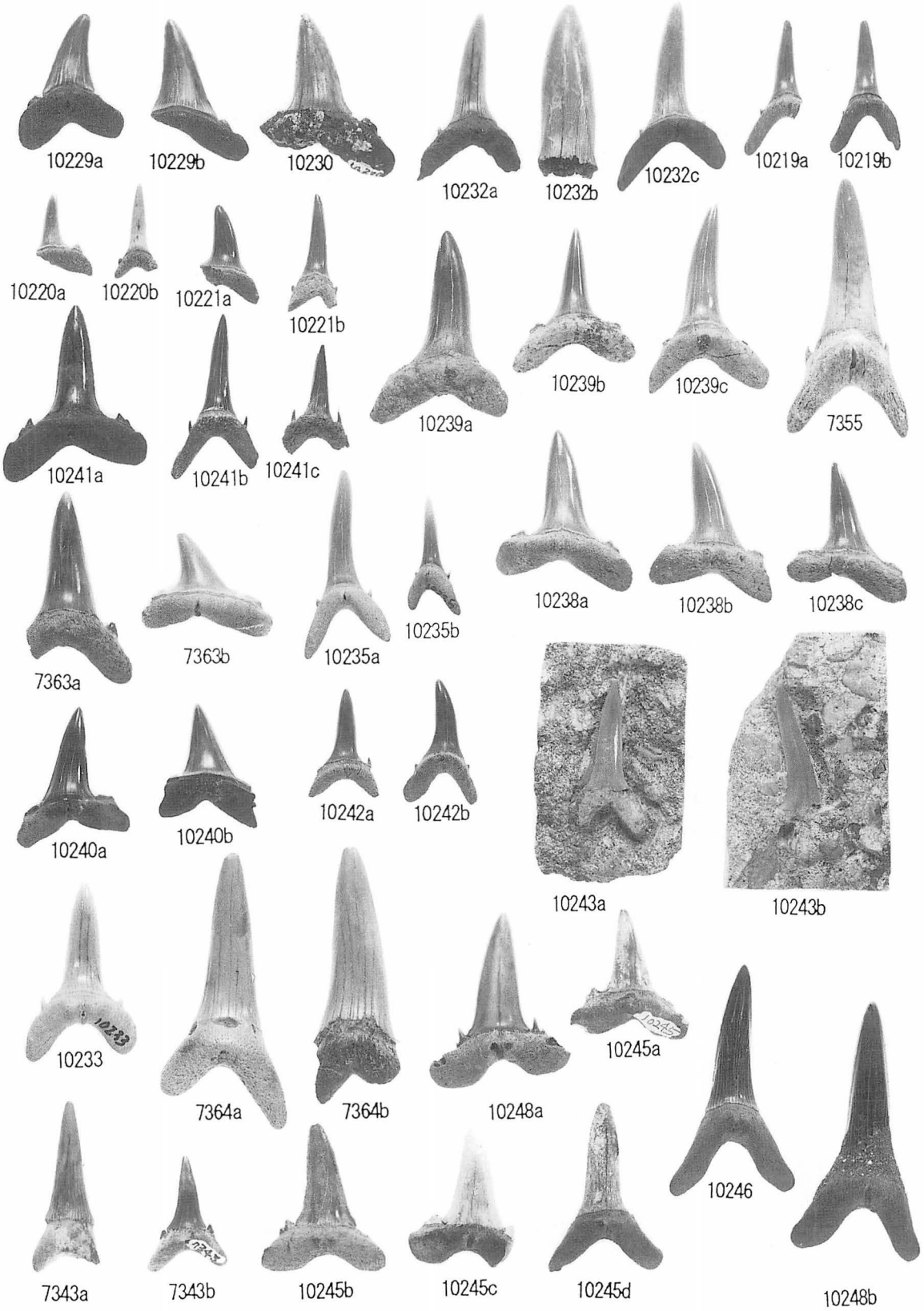
10224c
10224d
10226a
10226b
10226c
10226d
10227
10228

Plate 32 (× 1.0)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10219b
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10220b
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10221b
10239a
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10239c
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10241b
10241c
10238a
10238b
10238c
7363a
7363b
10235a
10235b
10240a
10240b
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10242b
10243a
10243b
10233
7364a
7364b
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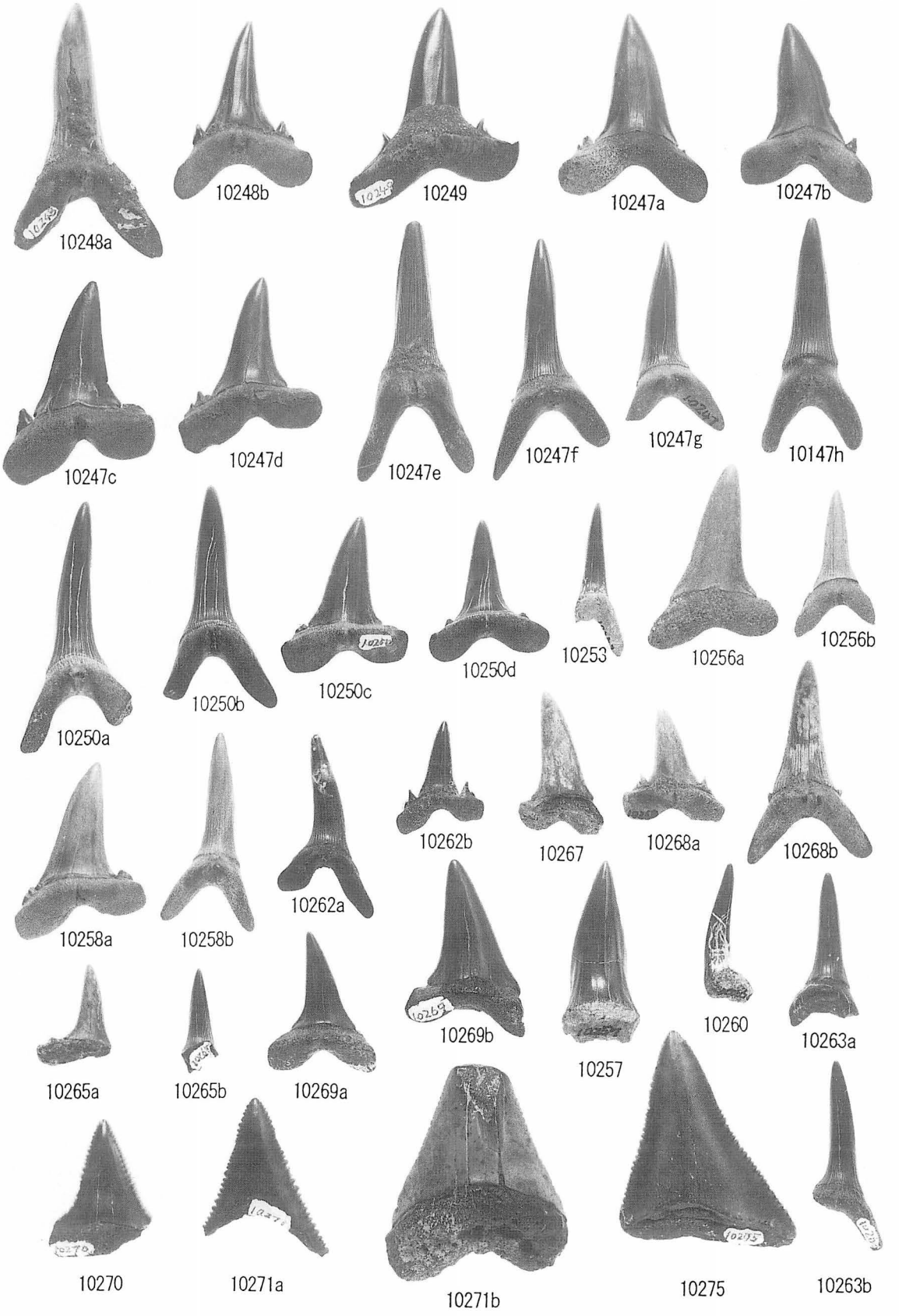
10245a
10246
7343a
7343b
10245b
10245c
10245d
10248b

Plate 33 (× 1.0)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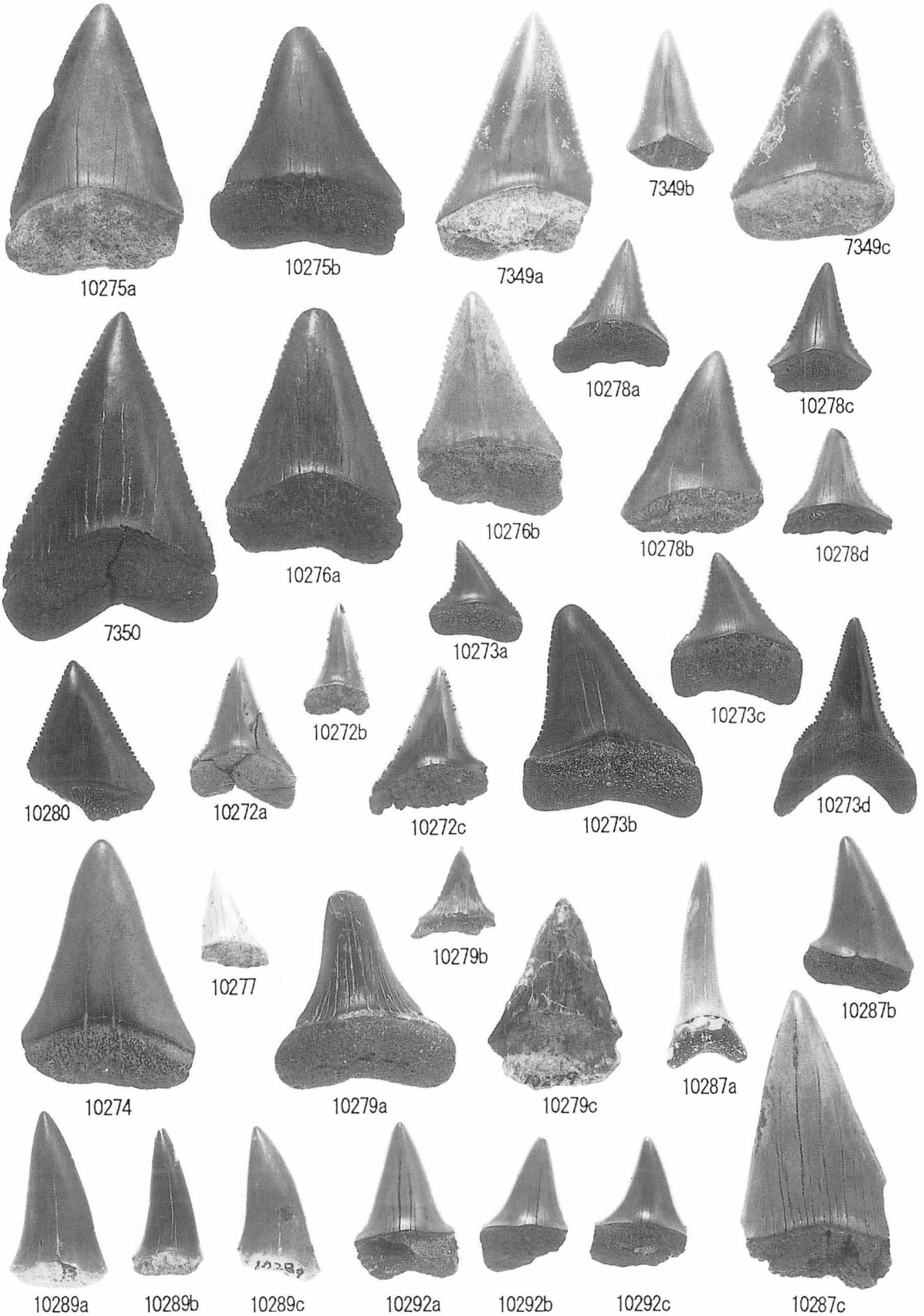
10247a
10247b
10247c
10247d
10247e
10247f
10247g
10147h
10250a
10250b
10250c
10250d
10253
10256a
10256b
10258a
10258b
10262a
10262b
10267
10268a
10268b
10265a
10265b
10269a
10269b
10257
10260
10263a
10270
10271a
10271b
10275
10263b

Plate 34 (× 1.0)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10275b
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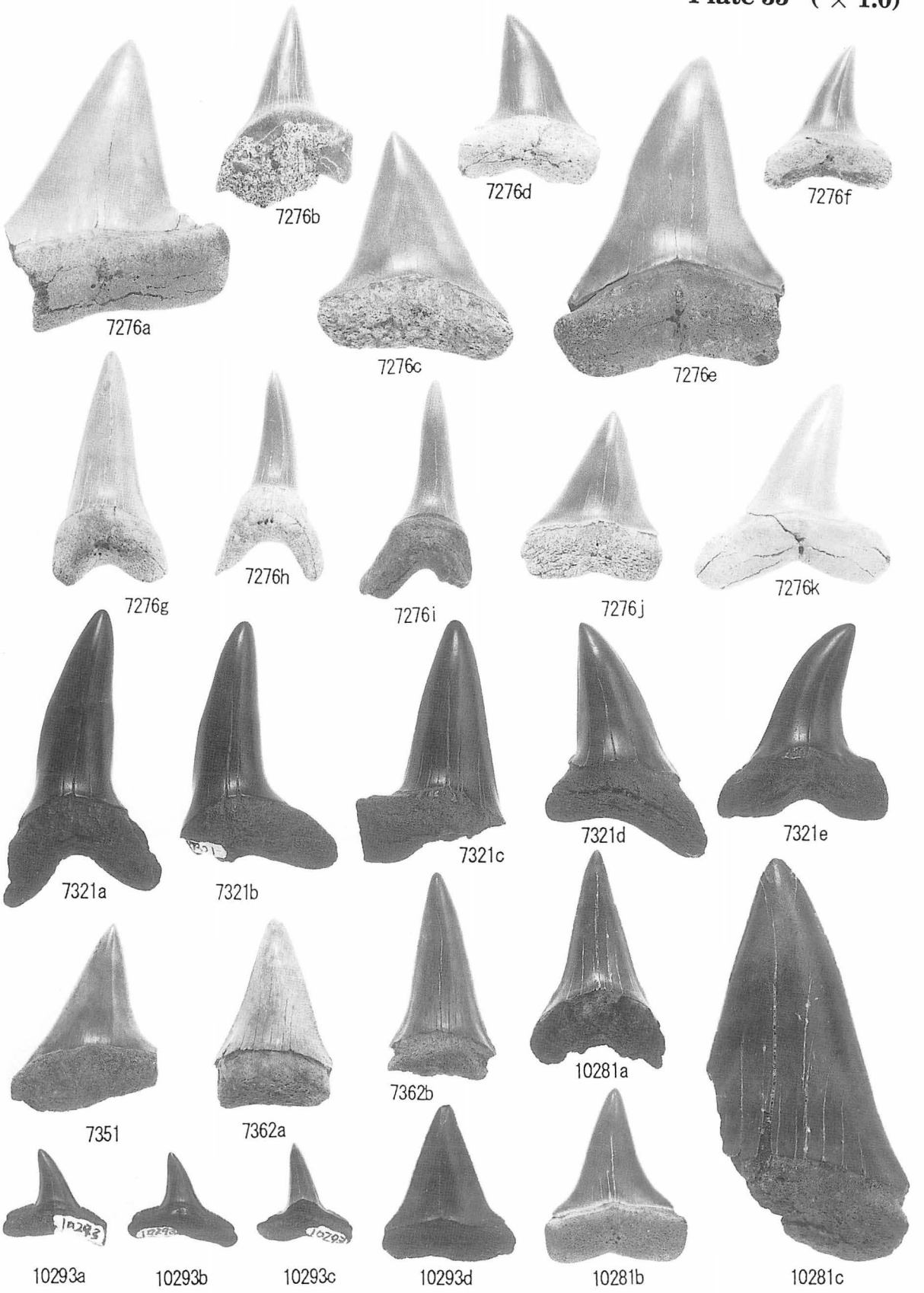
7349b
7349c
10278a
10278c
10276b
10278b
10278d
7350
10276a
10273a
10272b
10273c
10280
10272a
10272c
10273b
10273d
10277
10279b
10287b
10274
10279a
10279c
10287a
10289a
10289b
10289c
10292a
10292b
10292c
10287c

Plate 35 (× **1.0**)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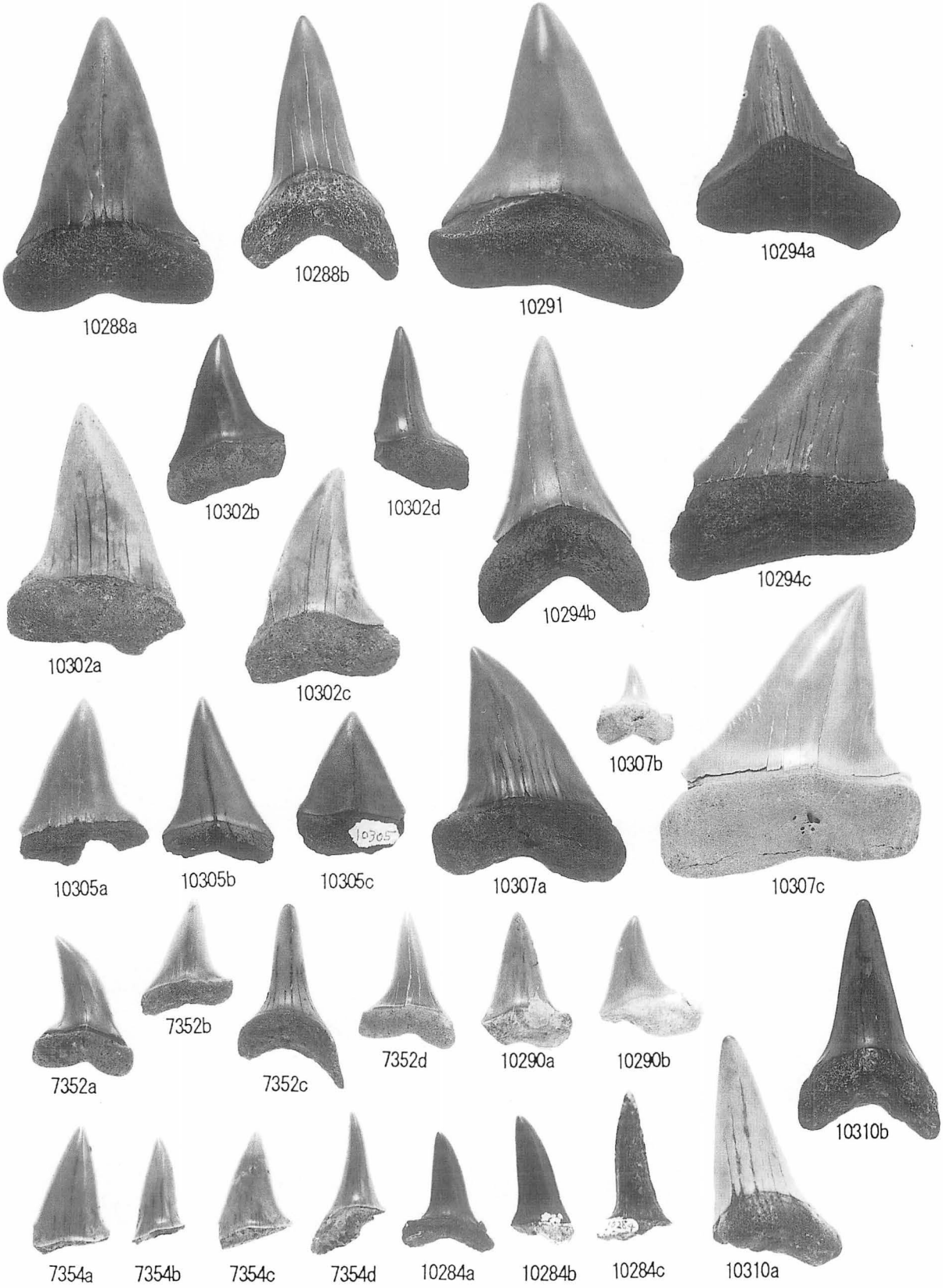
7276b
7276c
7276d
7276e
7276f
7276g
7276h
7276i
7276j
7276k
7321a
7321b
7321c
7321d
7321e
7351
7362a
7362b
10281a
10281c
10293a
10293b
10293c
10293d
10281b

Plate 36 (× 1.0)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10294a
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10302b
10302d
10294b
10294c
10302c
10305a
10305b
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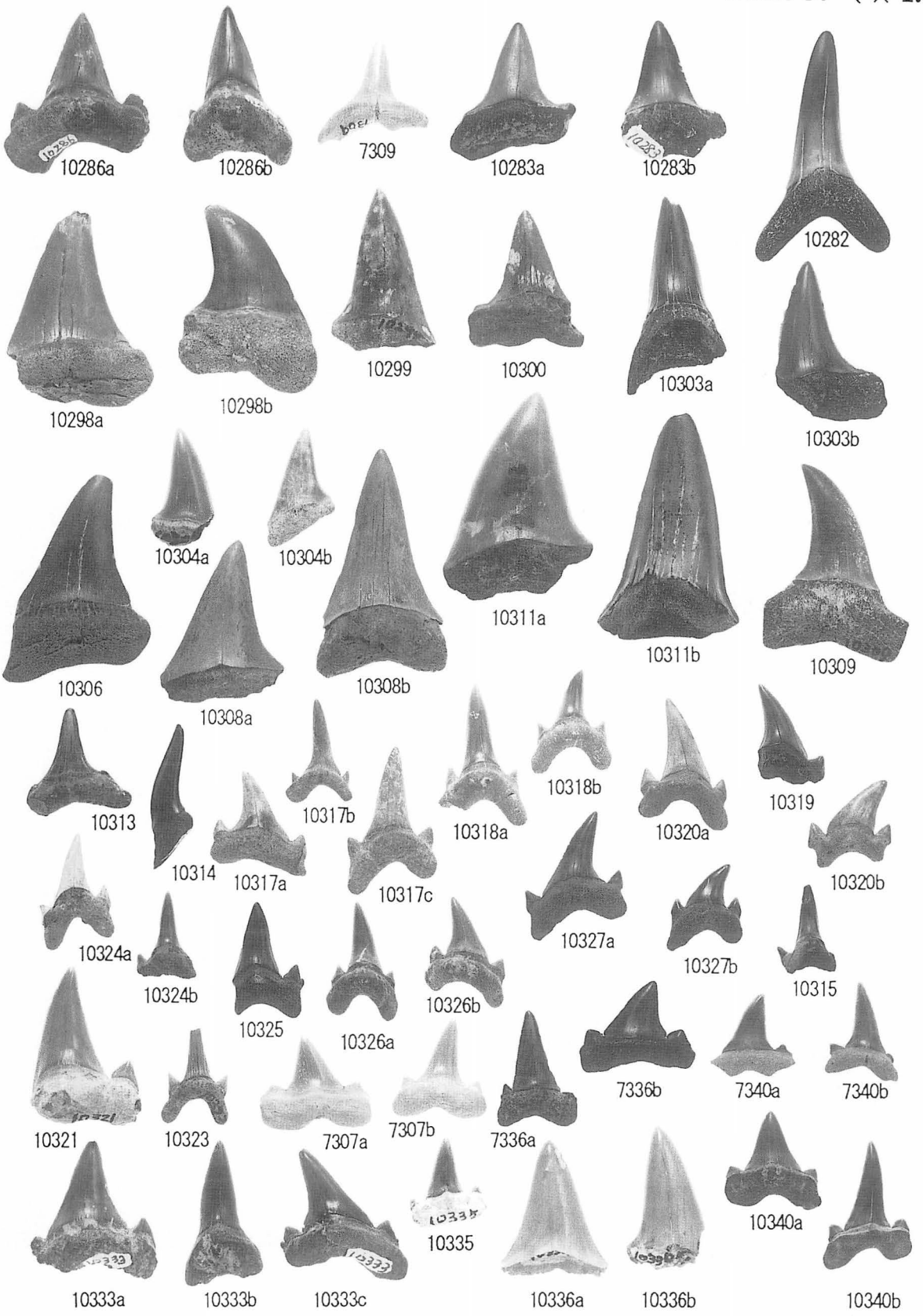
10307a
10307b
10307c
7352a
7352b
7352c
7352d
10290a
10290b
10310b
7354a
7354b
7354c
7354d
10284a
10284b
10284c
10310a

Plate 37 (× 1.0)


10286a
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10283a
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10298b
10299
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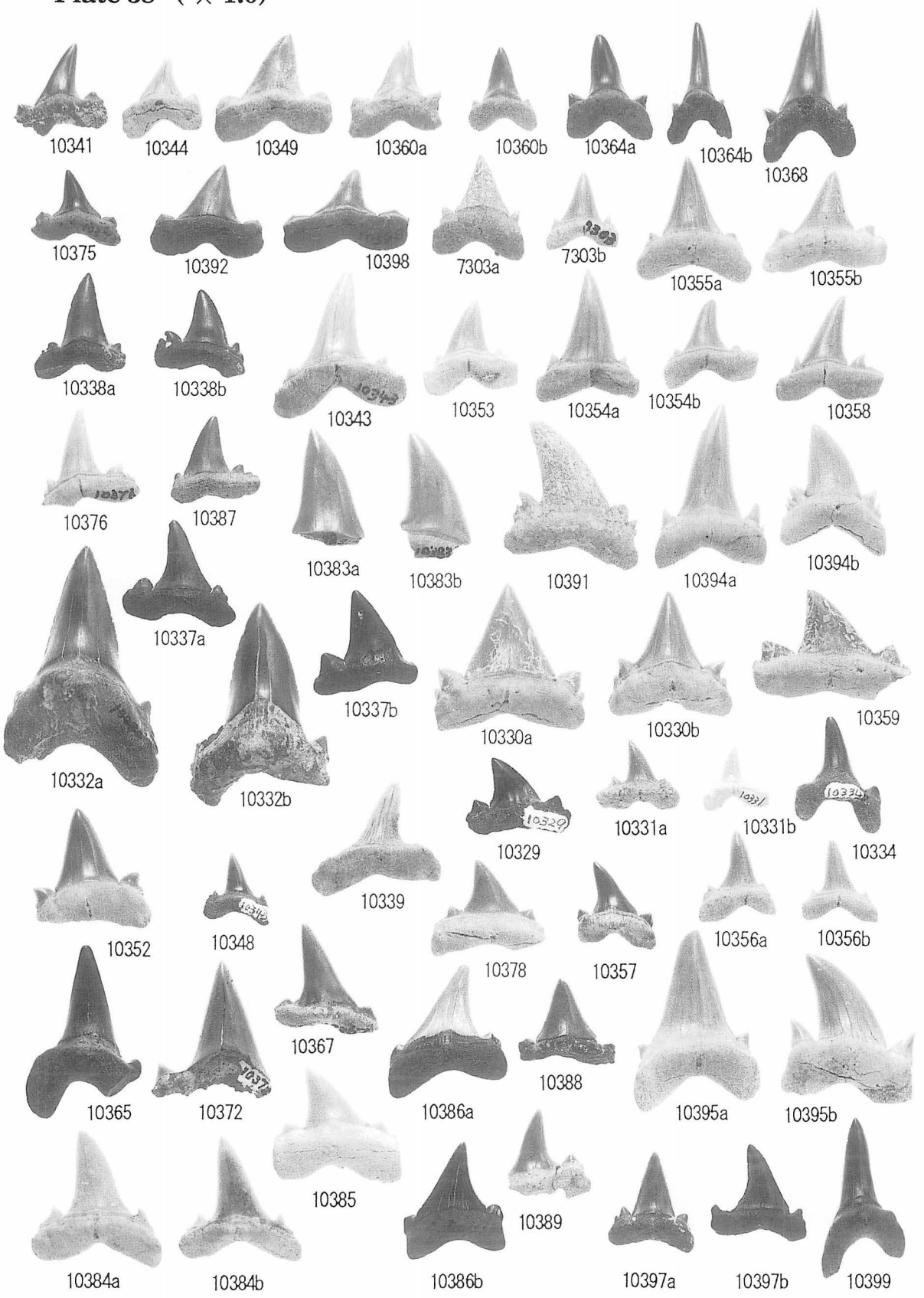
10303a
10303b
10304a
10304b
10306
10308a
10308b
10311a
10311b
10309
10313
10314
10317b
10317a
10317c
10318a
10318b
10320a
10319
10320b
10324a
10324b
10325
10326a
10326b
10327a
10327b
10315
10321
10323
7307a
7307b
7336a
7336b
7340a
7340b
10333a
10333b
10333c
10335
10336a
10336b
10340a
10340b

Plate 38 (× 1.0)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10360b
10364a
10364b
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10392
10398
7303a
7303b
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10355b
10338a
10338b
10343
10353
10354a
10354b
10358
10376
10387
10383a
10383b
10391
10394a
10394b
10337a
10332a
10337b
10330a
10330b
10359
10332b
10329
10331a
10331b
10334
10339
10352
10348
10378
10357
10356a
10356b
10367
10365
10372
10386a
10388
10395a
10395b
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10389
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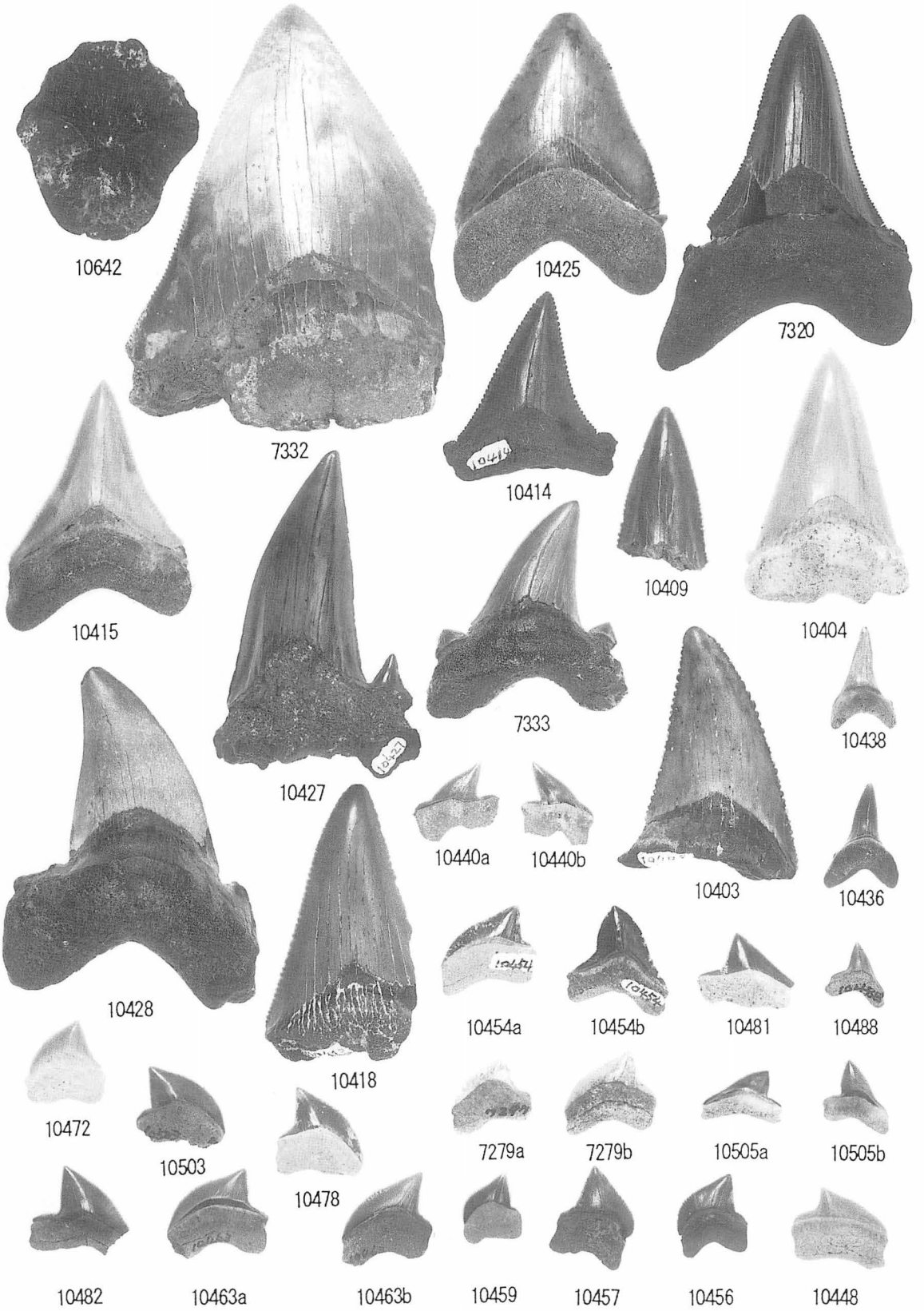
10384b
10386b
10397a
10397b
10399

Plate 39 (× 1.0)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10440a
10440b
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10418
10454a
10454b
10481
10488
10472
10503
7279a
7279b
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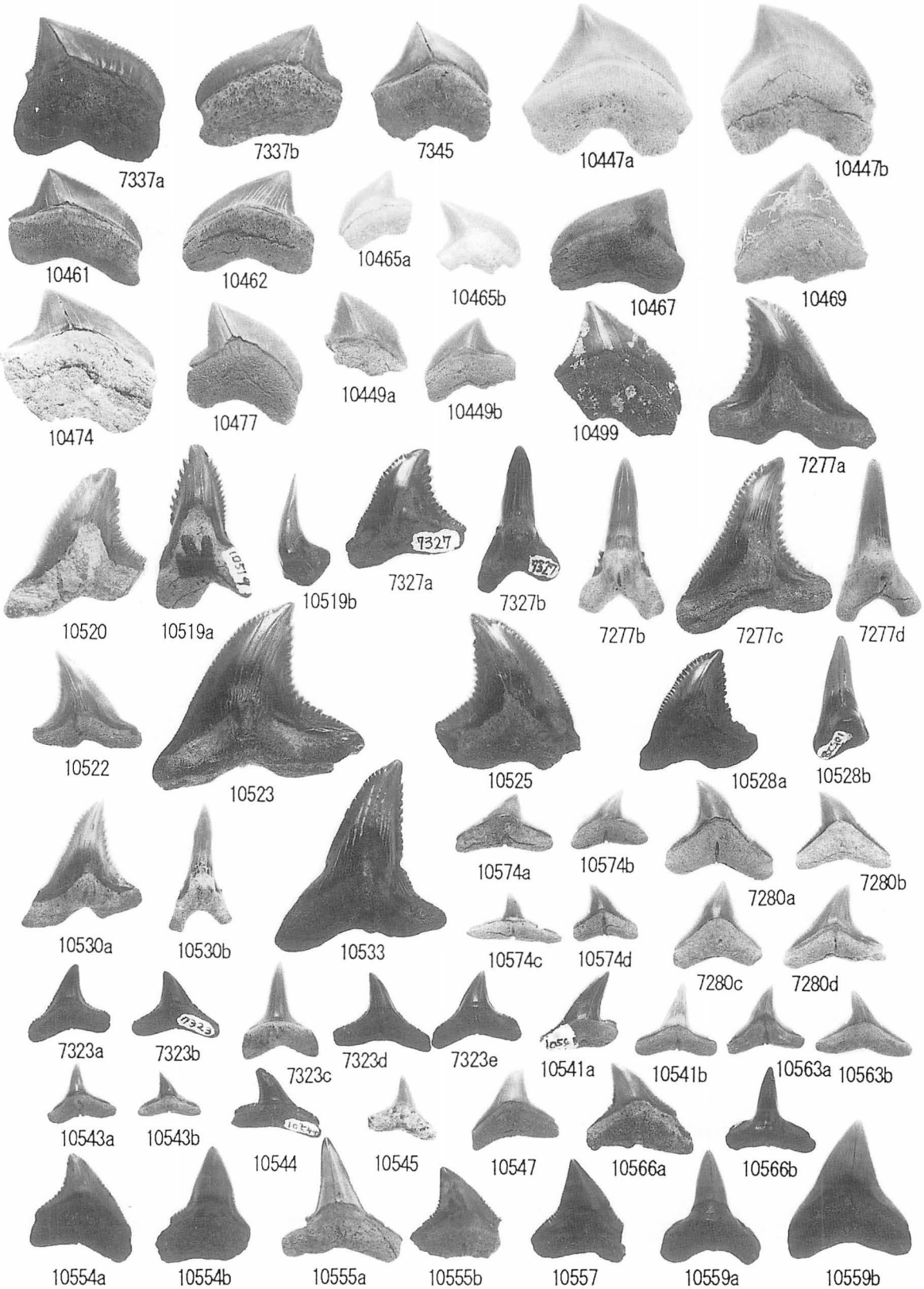
10505b
10478
10482
10463a
10463b
10459
10457
10456
10448

Plate 40 (× 1.0)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10447b
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10462
10465a
10465b
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10469
10474
10477
10449a
10449b
10499
7277a
10520
10519a
10519b
7327a
7327b
7277b
7277c
7277d
10522
10523
10525
10528a
10528b
10530a
10530b
10533
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10574b
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7280b
10574c
10574d
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7280d
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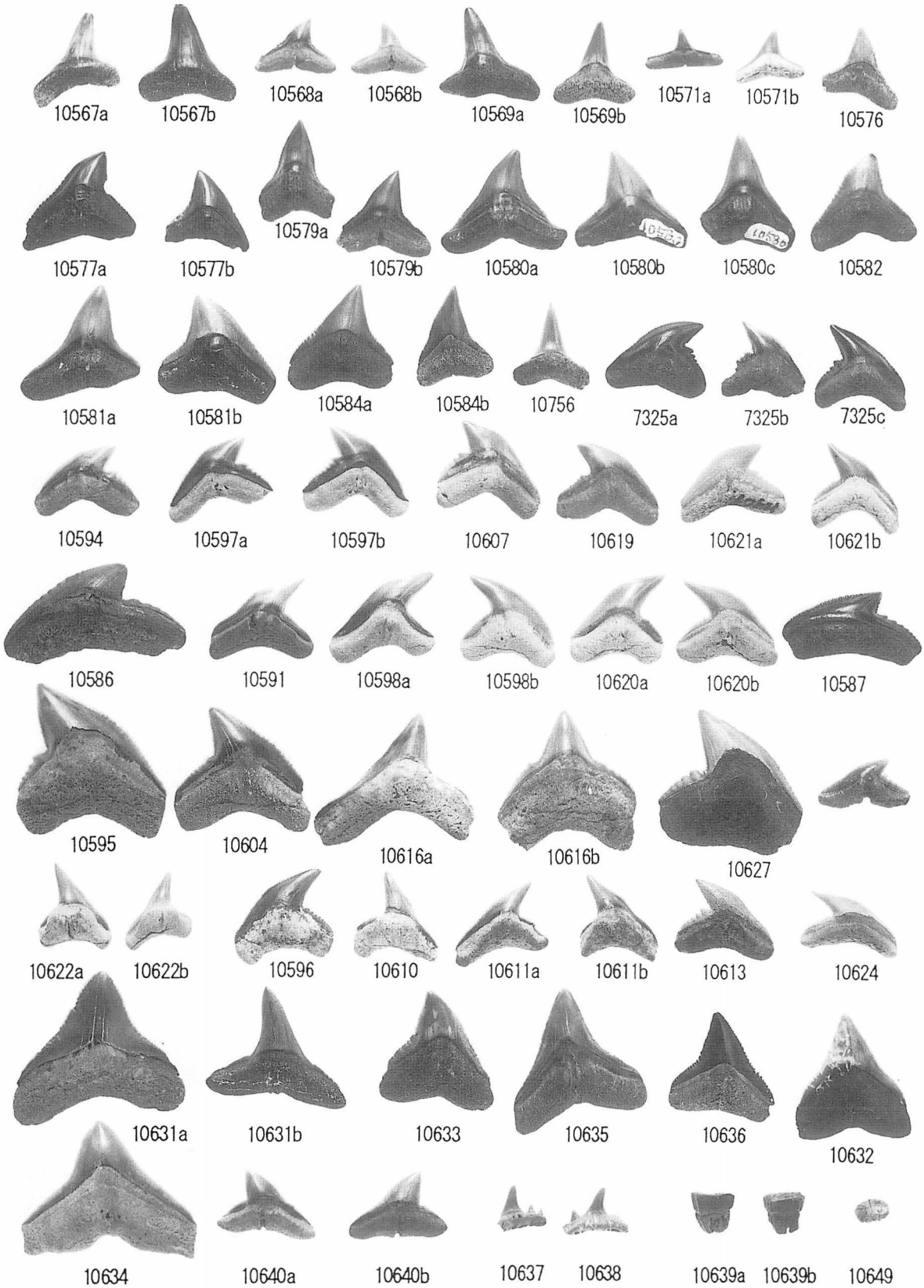
7323b
7323c
7323d
7323e
10541a
10541b
10563a
10563b
10543a
10543b
10544
10545
10547
10566a
10566b
10554a
10554b
10555a
10555b
10557
10559a
10559b

Plate 41 (× 1.0)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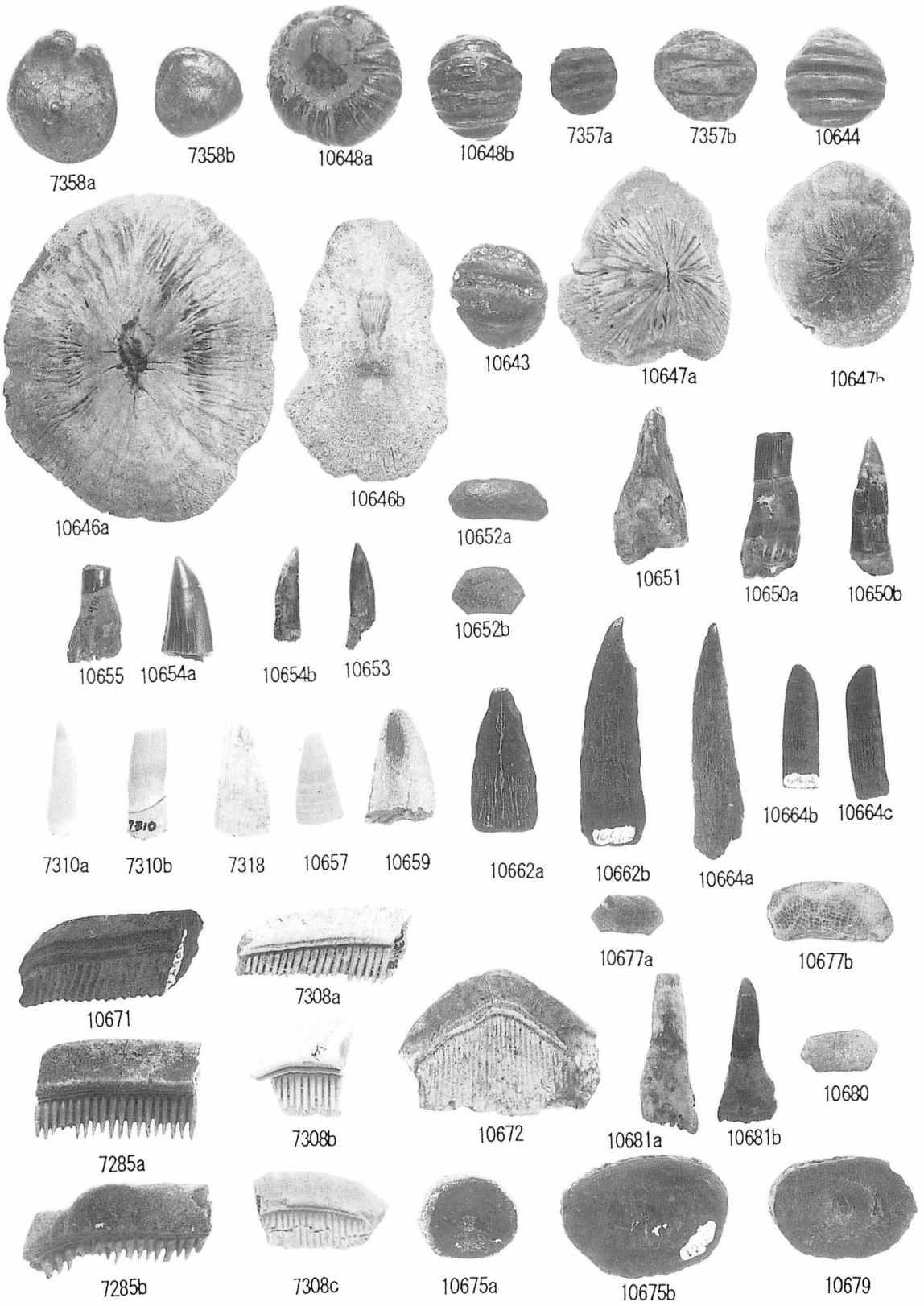
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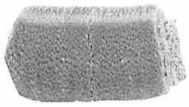

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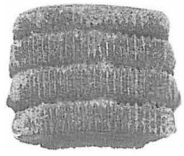

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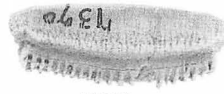

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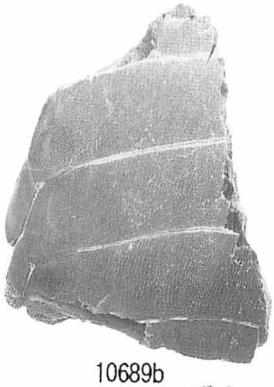

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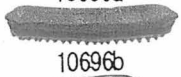

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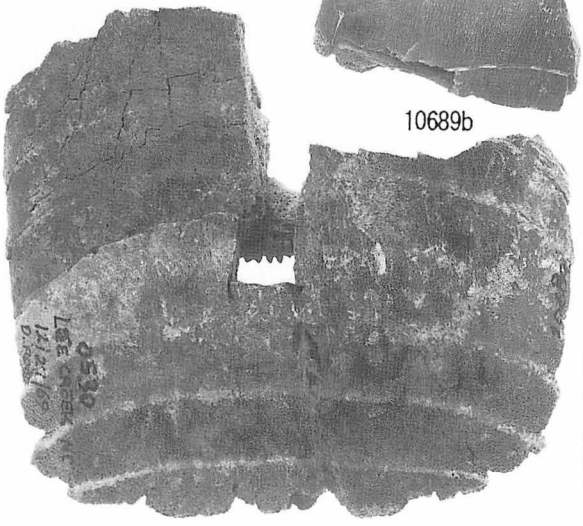

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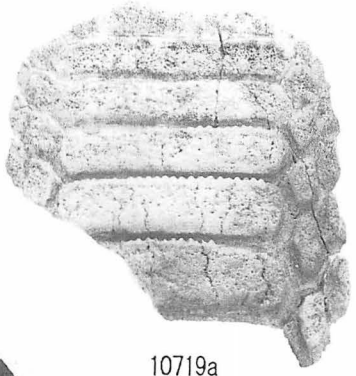
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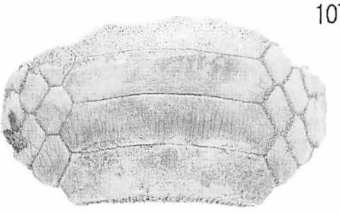
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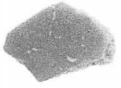
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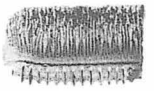
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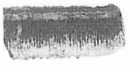
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＜解説＞

中生代・新生代軟骨魚類のGerard R. Caseコレクション

上野輝彌
（国立科学博物館）

G. R. Case氏が長い年月をかけて、研究のかたわら収集・蓄積してこられた、中生代と新生代の軟骨魚類の標本資料は、その質と量において我が国随一のものである。

Case氏はいくつもの論文の著者であるから、産地、地層、地質年代などに関する標本のデータは信頼のできる正確なものである。このたび神奈川県立博物館が古生代の軟骨魚類化石標本目録に続いて、Case氏の中生代・新生代軟骨魚類化石標本目録を写真とともに出版されるに至ったことは、サメ・エイ類の進化古生物学的研究に対する大きな貢献である。

他の脊椎動物の場合と同様に、軟骨魚類の進化の研究においてもっとも重要な形質は歯である。特に中生代後期から新生代にかけての軟骨魚類は歯の形態における分化が著しく、歯を見れば種類が分かる。また歯に基ずいて新種の記載がなされる場合が多い。したがって、Caseコレクションの大きな部分は歯であり、一つ一つは小さいが重要な情報の源である。

中生代、新生代の軟骨魚類の分類体系は未だ完全の域に達しておらず、比較的最近になってまとめられたものにフランスのH. Cappetta博士（1987）による古魚類学ハンドブック第三巻B，軟骨魚類Ⅱ，中生代・新生代の板鰓類（Gustav Fischer Verlag刊）がある。
Caseコレクションもこの本の体系にしたがって整理されている。Case氏はCappetta博士と共著の論文が幾つもあるので当然であろう。

図1　New Jersey州のCase氏宅に収められていたサメ類歯化石

しかし、Cappetta博士の1987年の分類体系も少しずつ見直しが進んでおり、科や属の定義などもさらに改定され、整理されて、明確にされつつある。現存の板鰓類に関しては南アフリカのL. J. V. Compagno博士（1984）や日本の白井滋博士の分類体系が現在注目を浴びている。

日本の博物館ではどうしても見える部分、すなわち展示や教育に力が入って、地味な見えない部分すなわち標本資料、調査、研究がおろそかにされがちであるが、世界的なCaseコレクションが散逸せず、神奈川県立博物館という永久保存のシステムに組み入れられ、未来の世代に貴重な自然史科学的情報源として保存されていくことになったことを、軟骨魚類に興味をもつ研究者の一人としてまことに喜ばしく思う次第である。

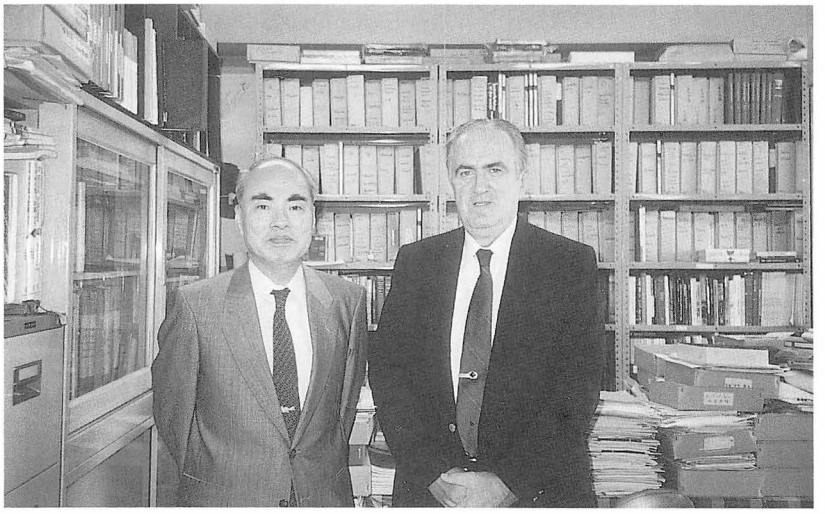

図2　国立科学博物館分館の古生物研究室を訪れたCase氏（右）と筆者（左）

Gerard R. Case標本と日本の軟骨魚類化石研究

後藤仁敏
（鶴見大学・歯学部）

アメリカ合州国のニュージャージー州リッジフィールドに住む建築デザイナーであるGerard Ramon Case氏は、軟骨魚類化石の研究者としても世界的に有名である。“Fossil Sharks: A Pictorical Review”（1973）と“A Pictorical Guide to Fossils”（1982）の2つの著書をはじめ、81篇もの学術論文をものしているのである（その大部分は軟骨魚類に関するものであるが爬虫類に関するものもある）。しかも、“Journal of Paleontology”、“Palaeontographica”、“Journal of Vertebrate Paleontology”などの一流の国際誌に堂々と論文を発表し、また、この分野の権威であるシカゴのフィールド自然史博物館のRainer Zangerl博士やフランスのモンペリエ大学のHenri Cappetta博士らと、共同研究をおこなっているのである。Case氏は、本職からもうかがえるように、化石のスケッチがたいへん得意で、彼の筆による素晴らしい図は、論文だけでなく、氏の著書やZangerl（1981）の教科書にも掲載されている。まさに、プロ顔負けのアマチュア古生物学者である。

このようなCase氏の30数年におよぶ脊椎動物古生物学に対する功績に対し、一昨年（1992年）、アメリカの古生物学会（The Paleontological Society）から“The Harrell L. Strimple Award”という名誉ある賞が贈られた（Schwimmer, 1993）。このことをご本人は、たいへん喜んでおられるようである。

同じサメ化石をやっていることから、私とも古くから交流があり、たくさんの論文や著書を贈っていただいてきた。とくに、自分で出版された“Fossil Sharks: A Pictorical Review”はじつに素晴らしい本で、サメ歯化石のテキストとして最高のものである。この本には、著者の若い時の写真（図1）が掲載されており、私はそれを見るたびにサメを研究している人は皆このように“いい男”なのか（？）と感心したものであった。Case氏の2つの著書は、いつも私の座右にあり、新しい化石の名前をしらべる時、何よりもまず最初に開くようにしている。私どもが運営していた化石研究会にも、当時唯一の外国人会員として入会していただいたりもした（当時の“Fossil Club”という名称が気に入られたせいか？）。そして、1991年10月には、標本を神奈川県立博物館に譲渡された機会に来日され、初めてお会いして親交を深め、日本産の標本の同定をしていただいた。

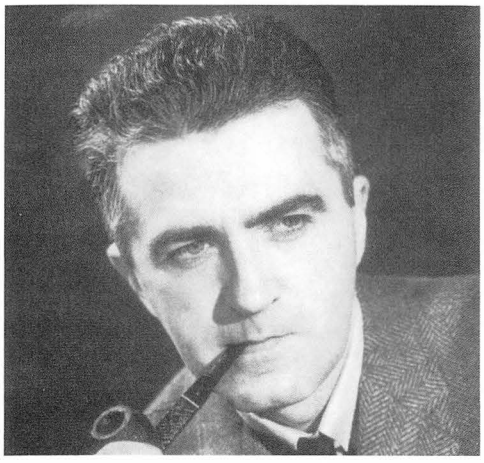

図1　Gerard R. Case氏の著書に掲載された著者の若いころの写真（1969年撮影）.氏はこの写真が気に入っているようで，2冊ともこの写真が掲載されている。

その折に、『Gerard Ramon Case軟骨魚類化石標本目録　第１集　古生代軟骨魚類化石』（1992）が出版されたが、今回、引き続いて『第２集　中生代・新生代軟骨魚類化石』が出版されることは、じつに嬉しいことである。そして、再び標本整理のために昨年９月に来日され、今回は私の勤務先の鶴見大学に来ていただき、総持寺を案内したのも、よい思い出になった。図２の写真は、その時私の研究室で撮影したものである。

この２冊の標本目録に収められたCase氏の軟骨魚類化石標本は、おそらく世界で有数の第一級コレクションであろう。私は、これまでCase氏の本でしか見たことのなかった標本を実際手に取って見た時、なにかまぶしいような、まるで夢でも見ているような感覚をおぼえた。このような素晴らしい標本が、私の住む神奈川県の博物館に譲渡されるとは、なんと幸運なことだろうか。神奈川県は、軟骨魚類化石研究のメッカになると予想される。

思えば、私がサメ歯化石をテーマに選び、研究をはじめたのは、もう25年も前のことになった。その頃、日本産の魚類化石は、ほとんどが新生代第三紀中新世のものであった。その後、私がはじめて中生代・古生代の魚類化石を報告したのが1975年であり、それ以後、私の予想をはるかに越えて、次々とわが国の中生代・古生代の地層から魚類化石が発見されてきたのである。そして、ついにデボン紀の福地層から板皮類の皮甲化石まで発見されるに及んでいる（大倉・後藤,1992）。これらの化石の発見では、日本でも大倉正敏氏をはじめとするアマチュア古生物学者や各地の化石収集家がたいへんな活躍をされている。

ちょうどそんな仕事が進み始めた時に、Case氏の標本が譲渡され、氏に会って標本を同定していただき、アメリカ産の標本のレプリカまで贈っていただいたのである。そのことがどれほど、私の日本産軟骨魚類研究を支え、はげましになったことか。私は、大倉氏ら日本のアマチュア古生物学者の方々とともに、アメリカのCase氏との交流を得て、まさに百万の味方を得た気がしている。初期中生代のヒボドゥス類の歯化石の論文（後藤ほか,1991）は、まさにCase氏の教示により出来上がったものである。現在、大倉氏らとの共同研究として氏の採集された日本産の石炭紀とペルム紀のペタロドゥス類やコクリオドゥス類の歯化石の研究を進めているが、これもCase氏の協力がなければとても我々の手に負えるものではなかった。古生物学などの自然誌（史）研究においては、比較できる標本の存在が決定的ともいえる重要な役割を果たすのである。

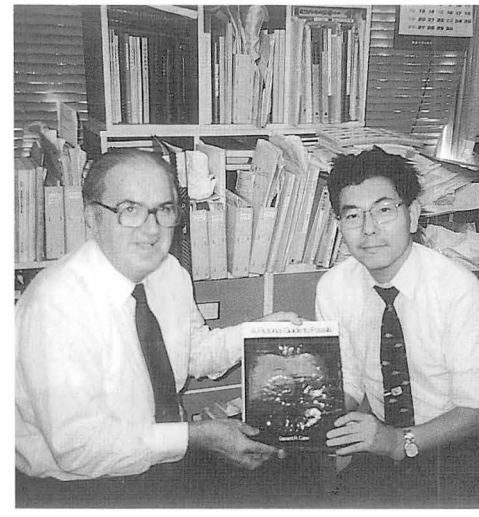

図２　Gerard R. Case氏（左）と筆者（1993年９月27日，鶴見大学解剖学教室にて）

今回、収録された中生代・新生代軟骨魚類化石は、古生代のものに比べて、量的にきわめて突出している。標本番号はひとつでも、数十、時には数百本の歯からなるものもある。これらの標本のほとんどは、Case氏自身が現地を訪れ、氏自身によって採集されたものと聞いている。

Case氏の足跡は、アメリカ国内はじめ、カナダ・モロッコ・ロシア・ウズベキスタンなどに及んでいる。ページの関係で、とても全部は写真で紹介することはできない。代表的なものは、来春、新しく自然史関係の博物館が小田原市入生田に開館する際に、展示されるという。その折に、是非、博物館を訪れて、見ていただきたいと思う。なお、古生代の標本がZangerl（1981）の分類体系にしたがって整理されているのに対し、中生代・新生代の標本はCappetta（1987）の分類体系にもとづいて整理されている。詳しくしらべたい方は、この2冊の教科書を参照しながら2冊の標本目録の写真を見れば、3億8000万年におよぶ軟骨魚類進化のすべてを見ることができよう。

そして、今後、このような素晴らしい標本に魅せられた若い人びとのなかから、軟骨魚類の研究をやりたいという若者が、プロであれ、アマチュアであれ、きっと出てくるものと期待される。思えば、私自身も、高校生の時、岐阜県の瑞浪層群や三重県の一志層群（ともに第三紀中新世）から採集したサメ歯化石の青く、ときに茶色に輝くそのエナメル質の色の美しさに魅了され、大学の卒論でサメの歯をテーマに選んだのであった。それは、自然の営力が何千万年、何億年もかけてみがき、つや出しされたものなのである。Case氏も、きっとこの歯化石の美しさに魅せられたに違いない。

そのような若者といっしょに軟骨魚類化石の研究を進めることができたら、どんなに楽しいだろうかと、いまから楽しみにしている。世界有数のコレクションであるCase標本が、わが国の軟骨魚類化石の研究の進歩に果たす役割は、きわめて大きいものとなろう。

最後に、永年にわたりこのような膨大な標本を集められたCase氏、整理されて目録を作成された神奈川県立博物館の関係者各位に深い感謝の意を表する次第である。

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標 本 目 録 索 引

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(No.は神奈川県立博物館地学標本番号)

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