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NEWSLETTER 12/2021

09.12.2021

Merry Christmas
And A Happy New
Year

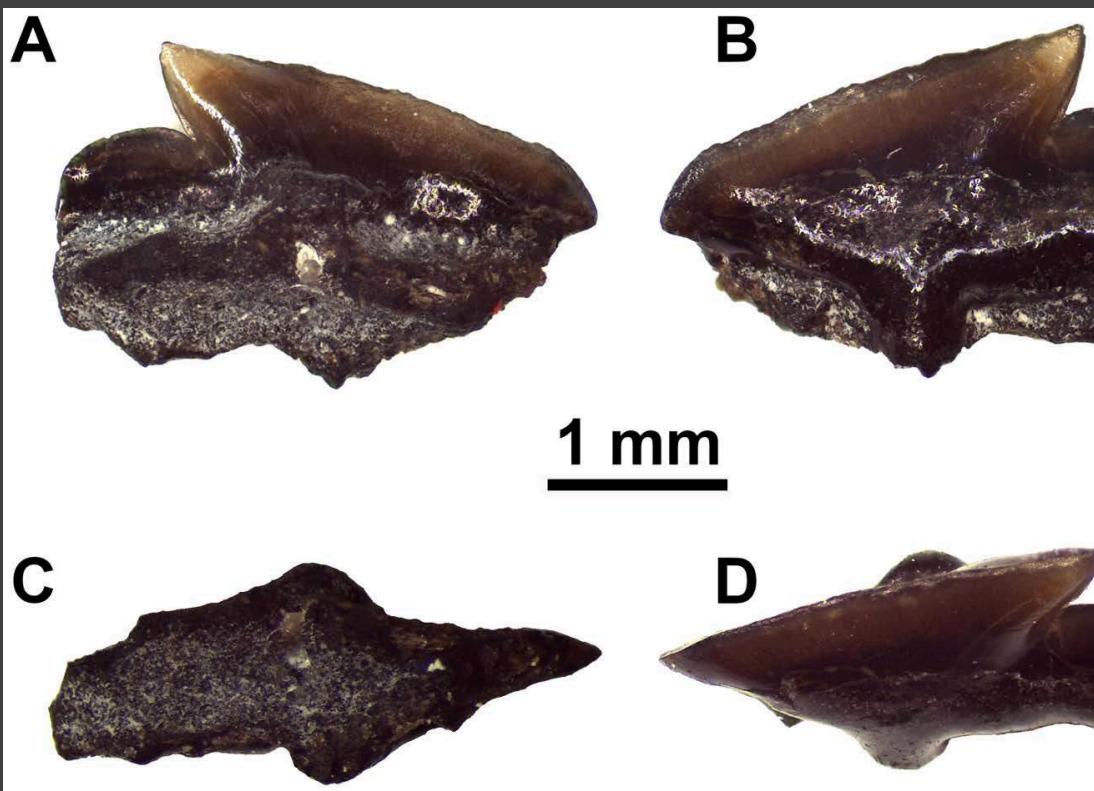


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Pollerspöck, J. & Straube, N. 2021, Bibliography database of living/fossil sharks, rays and chimaeras (Chondrichthyes: Elasmobranchii, Holocephali), www.shark-references.com, World Wide Web electronic publication, Version 2021

NEWS/ OWN RESEARCH

Pollerspöck, J. & Beaury, B. & Straube, N. & Feichtinger, I. 2021: Oldest evidence of the genus *Squalus* in the north alpine realm with remarks on its evolution and distribution through time. *Paleoichthys*, 2, 1-9



Abstract:

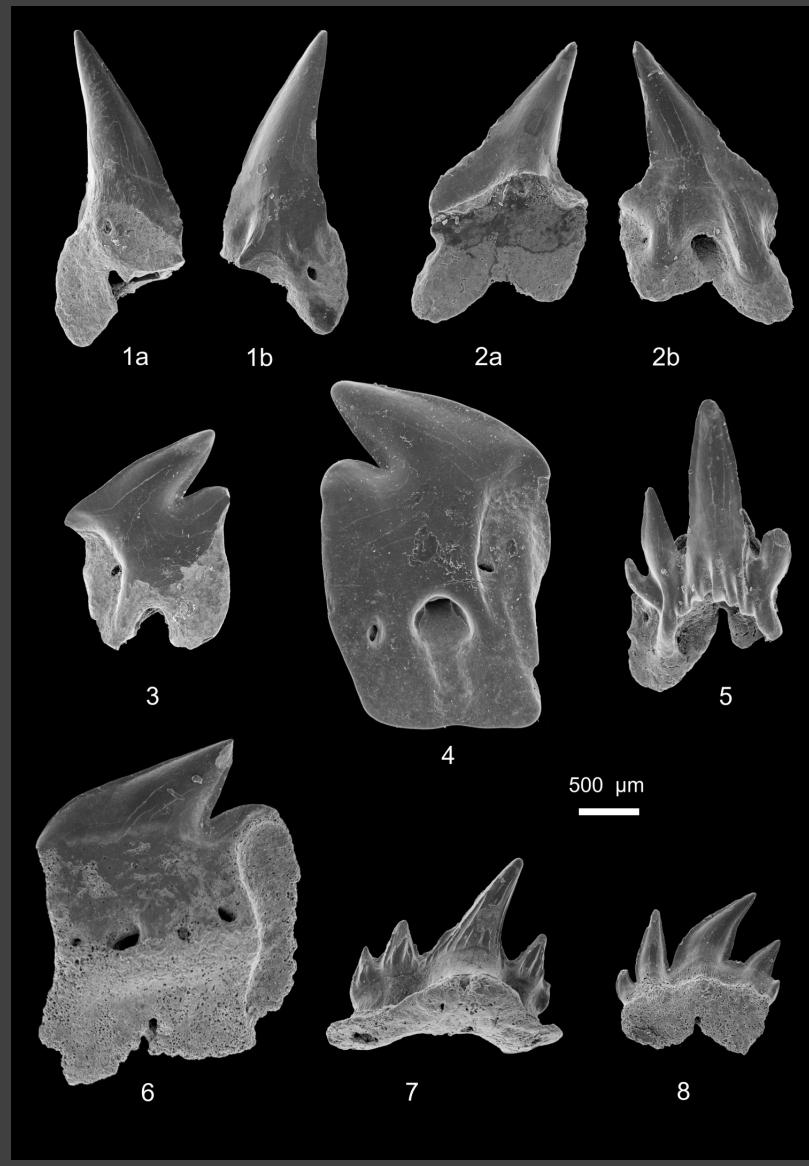
The distinct morphology of teeth of the dogfish sharks *Squalus* spp. allows for tracking its evolutionary history. Fossils of the genus are known since the early Cretaceous; however, fossilized teeth of *Squalus* from that period are scarce. Here, we report on the oldest finding of a *Squalus* tooth fossil (upper Campanian-lower

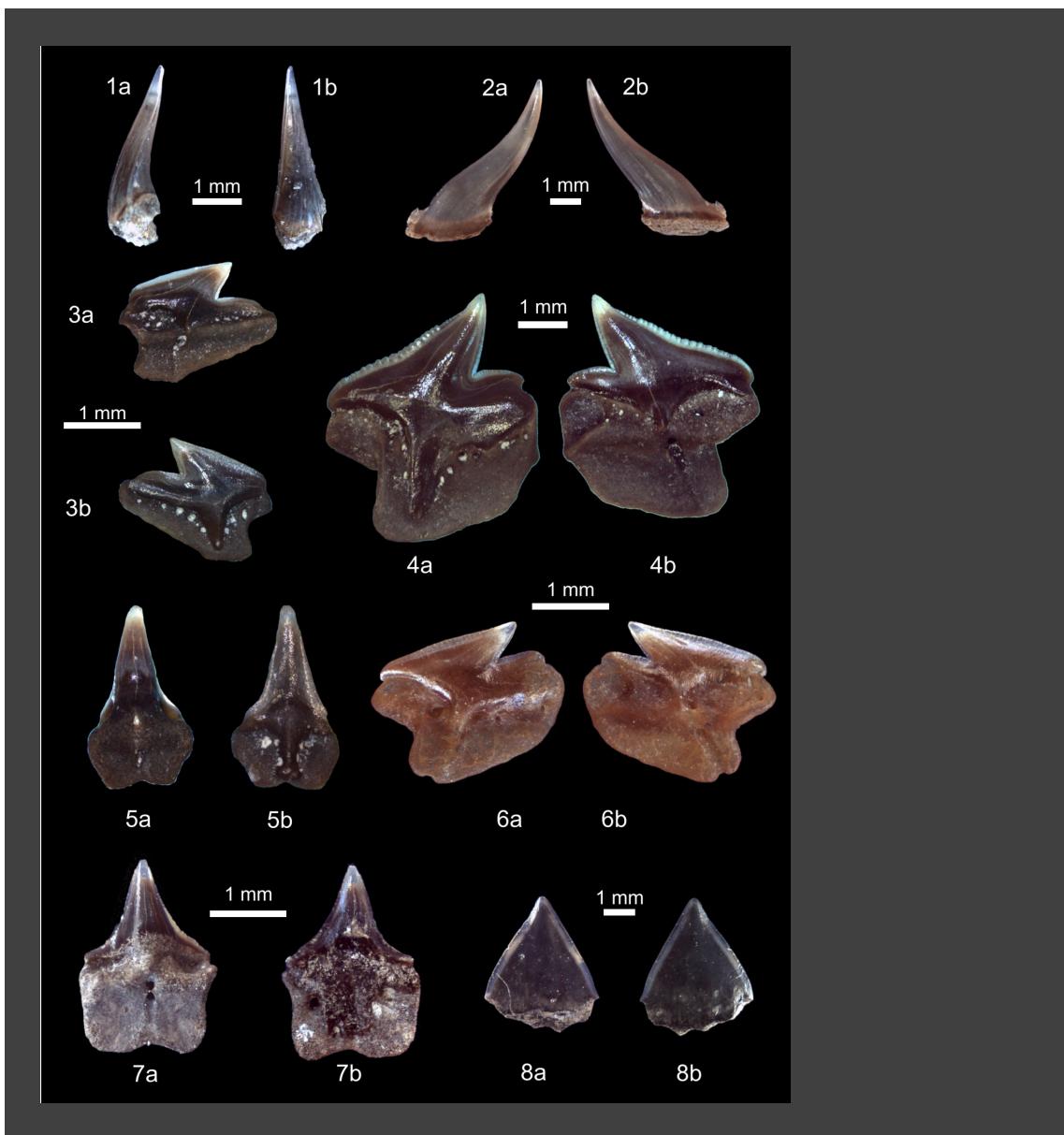
Maastrichtian) from the north alpine realm. The tooth is assigned to *S. vondemarcki* based on its morphological characters. Our finding adds information on the distribution of the genus during the Cretaceous period supporting a Tethyan origin in the early Cretaceous and subsequent distribution to other ancient oceans.

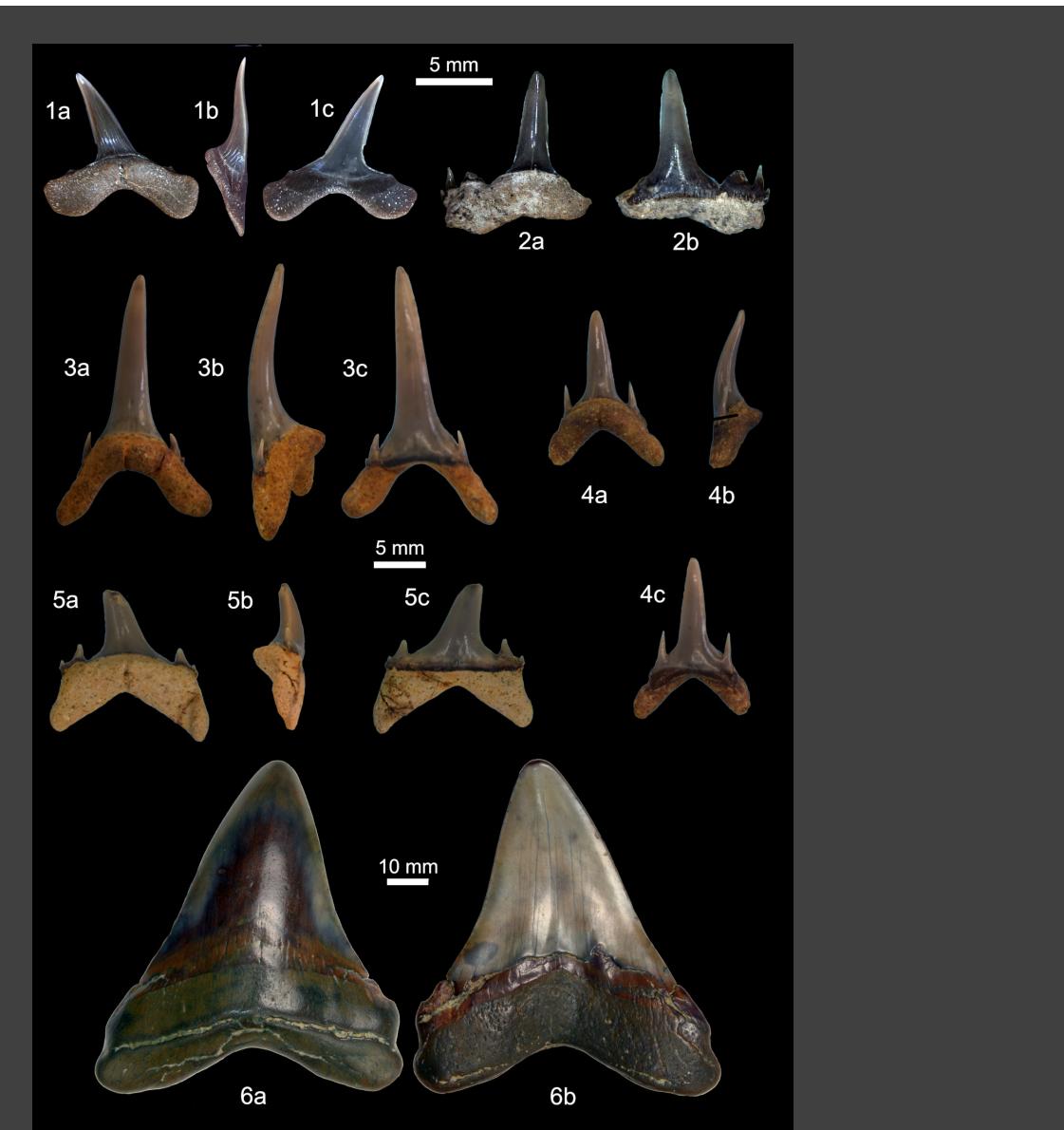
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in press!

Pollerspöck, J. & Güthner, T. & Straube, N. 2021 Re-evaluation of the Lower Miocene (Burdigalian, Ottangian) elasmobranch fauna (Elasmobranchii, Neoselachii) from Upper Austria (Allerding, near Schärding, Austria) with comments on the paleogeographic distribution of the recorded squaliform sharks. Annalen des Naturhistorischen Museums in Wien, Series A, 122, in press







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Abstract:

The newly collected shark and ray tooth fossils from the marine sediments of the Upper Marine Molasse close to Allerding (4.8 km SE of Schärding, Austria) allow for a review of the hitherto known diversity comprising a taxonomic update and the documentation of additional taxa. Besides ten taxa already known from the area, the following taxa were collected for the first time from the site: *Galeocerdo aduncus* Agassiz, 1835, *Rhizoprionodon* sp., *Hemipristis serra* Agassiz, 1835, *Apristurus* sp., *Pseudoapristurus nonstriatus* Pollerspöck & Straube, 2017, *Scyliorhinus* sp., *Keasius* sp., *Mitsukurina lineata* (Probst, 1879), *Odontaspis molassica* Probst, 1879, *Otodus (Megaselachus) chubutensis* (Ameghino, 1901), *Chlamydoselachus bracheri* Pfeil, 1983, Hexanchidae indet., *Paraheptanchias repens* (Probst, 1879), *Notorynchus primigenius* (Agassiz,

1843), *Deania* sp., *Isistius triangulus* (Probst, 1879), *Euprotomicrus* sp., *Etmosterus* sp., *Pristiophorus* sp., *Nanocetorhinus tuberculatus* Underwood & Schlögl, 2013, *Raja gentili* Joleaud, 1912, Rajidae sp. indet., *Rhinobatos* sp., *Aetobatus arcuatus* (Agassiz, 1843), and *Dasyatis rugosa* (Probst, 1877). Fossil teeth of *Euprotomicrus* represent the first fossil evidence of this taxon ever. Our results indicate a typical Miocene coastal shallow and continental shelf associated diversity. In addition, we reviewed the paleogeographic distribution ranges of the squaliform genera listed herein to test, if we can identify the origin of specific squaliform genera.

New book!

Our new book (in German) about fossil sharks and rays of the North Alpine Foreland Basin has been published! Many thanks to [Iris Feichtinger](#) and the publisher [Verlag Anton Pustet](#) for the great cooperation.

Haie im Alpenvorland - Fossile Zeugen eines verschwundenen Paradieses

Iris Feichti
Jürgen Pollersp

HAIE IM ALPENVORLAND

Fossile Zeugen eines
verschwundenen Paradieses

VERLAG ANTON PUSTET

Publisher: Verlag Anton Pustet

ISBN: ISBN-10: 3702510230

[Reading sample](#)

ADJUSTMENT OF CITATION STYLE IN SHARK REFERENCES

We started to change our old (and unique!) citation style to adapt to the APA citation style (for information please see: <https://www.mendeley.com/guides/apa-citation-guide>) to make the usage of references listed in shark references easier and more compatible with a widely accepted reference style adopted by several international scientific journals. The transition is ongoing, so far 15200 references are changed.

NEW VERSION 10_2021!

New database report published by team shark-references!

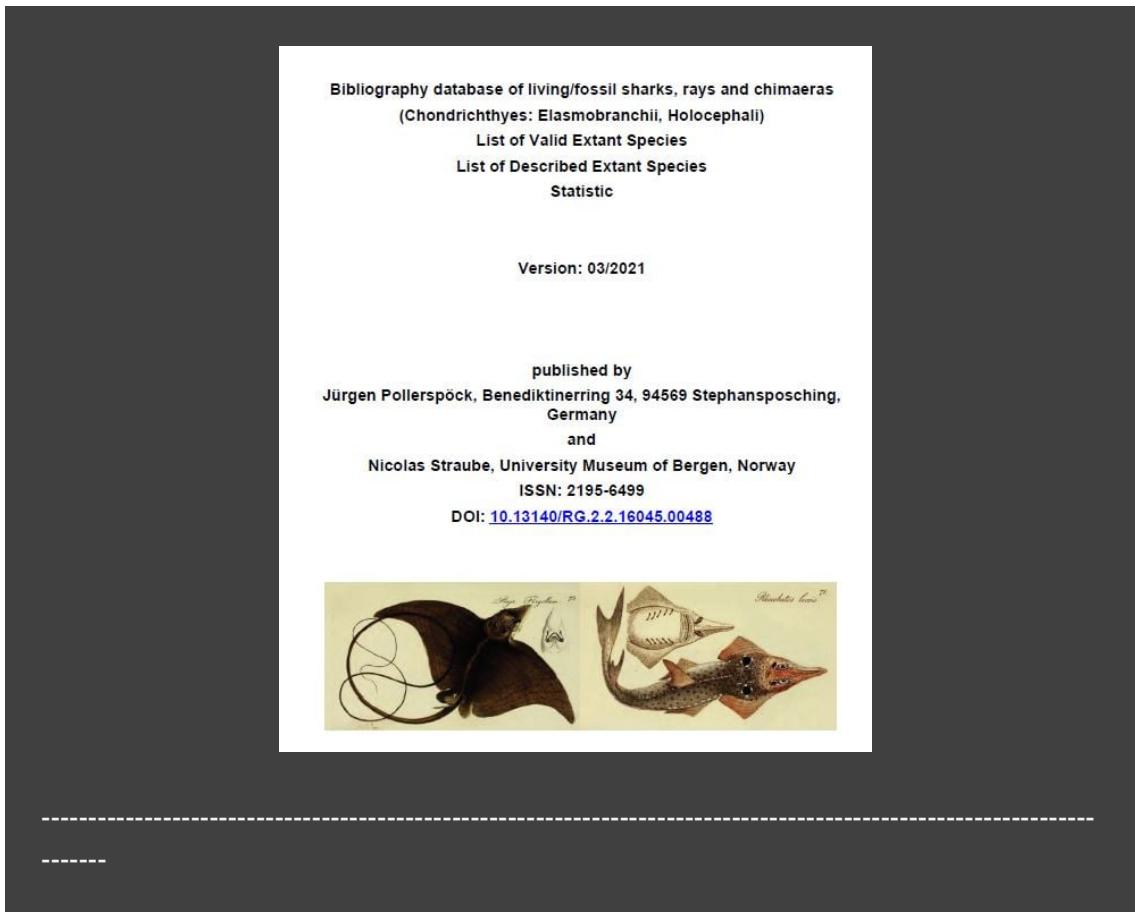
NEW VERSION 10_2021!

- You want to know how many species of sharks, rays and chimaeras there are?
- You want to know the distribution of species among the orders or families?
- You want to know the references of the first descriptions?
- You want a list of all sharks, rays and chimaeras ever described with their synonyms?

Our new data report can answer all these questions for you!

Abstract: The table and provided download links below are intended for informational use in Chondrichthyan research. The allocation aims for facilitating to find species numbers and most recent information on taxonomic changes. We will regularly update the table and download links at least twice annually. The updates will be announced on facebook (<https://www.facebook.com/sharkreferences>) and in our monthly newsletter (sign up here: <https://eepurl.com/sJNGb>). The Excel sheet allows for the application of individual filter- and sorting options. The list of described species complements taxonomic information for the list of valid species by providing synonyms and / or new taxonomic combinations.

[free download via research gate!](#)



NEW PARTNERS OF SHARK-REFERENCES

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[Partner in Google-Maps:](#)



New Images

Many thanks to the following people for providing images:

Frederik Mollen, Elasmobranch Research, Belgium for images of [Orectolobus ornatus \(DE VIS, 1883\)](#)



Adam Anderson for a image of *Heptranchias howellii* (Reed, 1946) and *Otodus (Megaselachus) megalodon*



Heptranchias howellii
Early to Middle Eocene (Late Ypresian to Middle Lutetian)
Lillebaelt Clay Formation
Frederica, Trelde Næs
Jutland, Denmark

Bryan Huerta for a image of [*Rhizoprionodon terraenovae* \(Richardson, 1836\)](#)



Jean-Marie Canevet for a image of [*Megalolamna paradoxodon* Shimada,](#)

[Chandler, Lam, Tanaka & Ward, 2017](#)



Missing papers:

Many thanks to all friends of shark-references, who sent us some missing papers last month!

Shark-References would kindly like to ask you for your contribution to this project.

At the moment we are looking for some of the following papers:

Extinct Chondrichthyes:

MATSUMOTO, H. (1936) Upper Miocene vertebrates from Kumanodô, Natori district, province of Rikuzen. *Dobutsugaku Zasshi*, 48: 475–480, 5 fig.

ALVINERIE, J. & ANDREIEFF, P. & ANGLADA, R. & AUBERT, J. & CAPPETTA, H. & CARALP, M. & CARATINI, C. & CARBONNEL, G. & CATZIGRAS, F. & COURME-RAULT, M.-D. & CHATEAUNEUF, J.-J. & DEMARcq, G. & DUCASSE, O. & FATTON, E. & GLAÇON, G. & LABRACHERIE, M. & LAURIAT,

A. & LE CALVEZ, Y. & LORENZ, C. & MAGNE, J. & MARGEREL, J.-P. & POIGNANT, A. & PUJOL, C. & ROGER, J. & ROMAN, J. & BLONDEAU, A. & MULLER, C. (1973) A propos de la limite oligo-miocène: résultats préliminaires d'une recherche collective sur les gisements d'Escornébœu (Saint-Géours-de-Maremne, Landes, Aquitaine méridionale). Présence de Globigerinoides dans les faunes de l'Oligocène supérieur. *Comptes rendus sommaires des séances de la Société géologique de France*: 75–76

Extant Chondrichthyes:

KAMOHARA, T. (1943) Some unrecorded and two new fishes from Prov. Tosa, Japan. *Bulletin of the Biogeographical Society of Japan*, 13 (17): 125–137

DE BUEN, F. (1950) Contribuciones a la Ictiología. II. El tiburón vitamínico de la costa uruguaya Galeorhinus vitaminicus nov. sp., y algunas consideraciones generales sobre su biología. *Publicaciones Científicas, Servicio Oceanográfico y de Pesca, Ministerio de Industrias y Trabajo, Montevideo* No. 4: 153–162.

WEIBEZAHN, F.H. (1953) Una nueva especie de Scyliorhinus de Venezuela (Chondrichthyes - Elasmobranchii). *Novedades científicas. Serie zoológica. Museo de Historia Natural La Salle*, 9: 1–7.

SMITH, J.L.B. (1958) The mystery killer, the new shark Carcharhinus vanrooyeni. *Veld & Vlei*, 3 (9): 12–14, 28.

GUBANOV, E.P. & SCHLEIB, N.A. (1980) Sharks of the Arabian Gulf. *Kuwait Ministry of Public Works, Agricultural Department, Fisheries Division. Sharks of the Arabian Gulf.*: 1–69

DOLGANOV, V.N. (1983) Rukovodstvo po opredeleniyu khryashchovykh ryb dal'nevostochnykh morei SSSR i sopredel'nykh vod. [Manual for identification of cartilaginous fishes of Far East seas of USSR and adjacent waters.] *TINRO, Vladivostok. Rukovodstvo po opredeleniyu khryashchovykh ryb dal'nevostochnykh morei SSSR i sopredel'nykh vod.*: 92 pp.

Please support www.shark-references.com and send [missing papers](#) (not listed papers or papers without the info-symbol) to juergen.pollerspoeck@shark-references.com or nicolas.straube@shark-references.com



AGUIAR, A.A. & GALLO, V. & VALENTIN, J.L. (2004)

Using the size independent discriminant analysis to distinguish the species of Myliobatis Cuvier (Batoidea: Myliobatidae) from Brazil. *Zootaxa*, 464: 1-7



AGUILAR, C. & GONZALEZ-SANSON, G. & HUETER, R. & ROJAS, E. & CABRERA, Y. & BRIONES, A. & BORROTO, R. & HERNANDEZ, A. & BAKER, P. (2014)

Captura de tiburones en la región noroccidental de Cuba. [Shark catches in the northwest region of Cuba.] *Latin American Journal of Aquatic Research*, 42 (3): 477-487

AGUILAR, F. (2006)

Desparación de la catanuda (*Pristis pristis*) en aguas Ecuatorianas. *Instituto Nacional de Pesca. Informe Técnico Guayaquil * Ecuador IRBA 2-83-03.*

It is easy for you to find out, which papers are missing!

All papers which are not labeled with the info-symbol in front of the citation are "missing papers" and it would be a great help, if you could send such papers to juergen.pollerspoeck@shark-references.com (e.g. AGUILAR, 2006)!

Upcoming Meetings:



First circular: Program, Registration and Call for Abstracts

The registration to the conference is done on the website: rif2022.scienceconf.org (openin of registration on 24/09/2021). A registration form will be sent to you by email.

On September 15-18, 2019, Bettina Reichenbacher (Munich), Tomas Přikryl (Praha) and Gloria Arratia (Kansas) invited a first "Fossil Fish symposium In", in Munich, in the frame of the Paleontological Society of Germany.

We concluded the symposium deciding to stay as an informal community of "Fish Paleontologists that have something to do with Europe" and to meet again in the next years at the favor of other national Fish or Pal events.

The Société Française d'Ictyologie organises the *Rencontres de l'Ictyologie en France* every 3 years and will be pleased to host the next *Fossil Fish symposium*

In Paris, March 15-18, 2022.



3rd Palaeontological Virtual Congress

1st-15th December, 2021

The increasing use of virtual platforms to communicate science encouraged us to create the 1st Palaeontological Virtual Congress in December 2018, followed by the second edition in May 2020. The two first editions were a success, so we are glad to present the **third edition of the Palaeontological Virtual Congress**. Our purpose is to spread, worldwide, the most recent scientific advances in palaeontology in a fast, easy and economical way.

Our initiative was **pioneering** in palaeontology, being the first exclusively virtually developed conference in our field. In these challenging times, online platforms have gained great relevance and are key to keep up the drive for **science communication** among peers and enthusiasts. This year we didn't want to miss the opportunity of offering you this platform so you can share your amazing research with the world, either by **oral communications** or **slides presentations**.

Even when online meetings are the norm, our main **aim** is still the same: to give international projection to the palaeontological research carried out by groups with limited economic resources, as well as to promote the participation of palaeontologists from developing countries around the world. And this is reflected in our **low-cost registration fees**.

What's new?

In order to reach out as widely as possible to researchers with fewer resources, this year we have created a **social fund** for participants from low and lower-middle income countries listed as such on [The World Bank's list](#). Additionally, to increase the range and diversity of nationalities and areas of expertise, this year we are

introducing the figure of **ambassadors**, for those participants who wish to advertise us among their colleagues in their country and/or speciality.

We have also set up a **Discord server** with multiple text and voice channels so you can give and receive feedback to and from your peers. We all miss seeing each other as we used to in conventional meetings, here you will be able to develop your networking skills and talk to other people face to face even if it's through a screen. We know that some of us might have developed a bit of 'zoom fatigue', but we believe that participants will enjoy engaging in **fruitful conversations**, a taste of what scientific meetings used to be.

To sum up...

The 3rd Palaeontological Virtual Congress combines the benefits of traditional meetings (i.e., providing a forum for discussion, including **guest lectures**, and the production of an **abstract book**, among other features) with the advantages of online platforms, which allow a wider reach around the world. We would love to have you here sharing your research, engaging in exciting discussions, and enjoying other peers' works.

More information coming soon, stay tuned!

TAXONOMIC NEWS/ NEW SPECIES

Extant Chondrichthyes:

no taxonomic news this month

Extinct Chondrichthyes:

Roelofs, B. & Konigshof, P. & Trinajstic, K. & Munkhjargal, A. (2021): Vertebrate microremains from the Late Devonian (Famennian) of western Mongolia. *Palaeobiodiversity and Palaeoenvironments*, 101(3), 741–753

New genus: *Junggarensis*

New species: *Junggarensis ambiguus*

Abstract: A middle Famennian shallow-water vertebrate assemblage is described from the shallow-water shelf deposits exposed in the western Mongolia Hushoot

Shiveetiin gol section from the Baruunhuurai Terrane of the Central Asian Orogenic Belt (CAOB). The low diversity, yet abundant chondrichthyan fauna represents a typical shallow-water shark biofacies but lacks the expected protacrodont and phoebodont species, instead comprising almost exclusively of ctenacanthiform shark teeth and a new genus and species *Junggarensis ambiguus* gen. et sp. nov. This new species appears highly derived, likely occupying the shallow-water niche protacrodont and orodont sharks typically inhabit. The identification of tooth variation in *Junggarensis ambiguus* gen. et sp. nov. has allowed for the synonymy of previous indeterminate Famennian shark teeth and in turn confirms vertebrate faunal connections between the Central Asian Orogenic Belt and areas along the northern margins of Gondwana.

Parasites:

no taxonomic news this month

PLEASE send your new papers to

juergen.pollerspoeck@shark-references.com or

nicolas.straube@shark-references.com

Latest Research Articles

Extant Chondrichthyes:

Arrowsmith, L.M. & Sequeira, A.M.M. & Pattiaratchi, C.B. & Meekan, M.G.-(2021)-Water temperature is a key driver of horizontal and vertical movements of an ocean giant, the whale shark *Rhincodon typus*.-*Marine Ecology Progress Series*, 679, 101–114 <https://dx.doi.org/10.3354/meps13899>

Ayres, K.A. & Ketchum, J.T. & González-Armas, R. & Galván-Magaña, F. & Hearn, A. & Elorriaga-Verplancken, F.R. & Martínez-Rincón, R.O. & Hoyos-Padilla, E.M. & Kajiura, S.M.-(2021)-Seasonal aggregations of blacktip sharks *Carcharhinus limbatus* at a marine protected area in the Gulf of California, assessed by unoccupied aerial vehicle surveys.-*Marine Ecology Progress Series*, 678, 95–107 <https://dx.doi.org/10.3354/meps13897>

Barbato, M. & Barria, C. & Bellodi, A. & Bonanomi, S. & Borme, D. & Cetkovic, I. & Colloca, F. & Colmenero, A.I. & Crocetta, F. & De Carlo, F. & Demir, E. & Di Lorenzo, M. & Follesa, M.C. & Garibaldi, F. & Giglio, G. & Giovos, I. &

- Guerriero, G. & Hentati, O. & Ksibi, M. & Kruschel, C. & Lanteri, L. & Leonetti, F.L. & Ligas, A. & Madonna, A. & Skoko, S.M. & Mimica, R. & Moutopoulos, D.K. & Mulas, A. & Nerlovic, V. & Pesic, A. & Porcu, C. & Riginella, E. & Sperone, E. & Tsouknidas, K. & Tuncer, S. & Vrdoljak, D. & Mazzoldi, C.-** (2021)-The use of fishers' Local Ecological Knowledge to reconstruct fish behavioural traits and fishers' perception of the conservation relevance of elasmobranchs in the Mediterranean Sea.-*Mediterranean Marine Science*, 22, 603–622 <https://dx.doi.org/10.12681/mms.25306>
- Baro-Camarasa, I. & Marmolejo-Rodriguez, A.J. & Cobelo-Garcia, A. & Palacios, M.D. & Murillo-Cisneros, D.A. & Galvan-Magana, F.**-(2021)-Essential and non-essential trace element concentrations in muscle and liver of a pregnant Munk's pygmy devil ray (*Mobula munkiana*) and its embryo.-*Environmental Science and Pollution Research*, *in press* <https://dx.doi.org/10.1007/s11356-021-17390-w>
- Bernard, A.M. & Finnegan, K.A. & Bitar, P.P. & Stanhope, M.J. & Shivji, M.S.-** (2021)-Genomic Assessment of Global Population Structure in a Highly Migratory and Habitat Versatile Apex Predator, the Tiger Shark (*Galeocerdo cuvier*).-*Journal of Heredity*, 112, 497–507 <https://dx.doi.org/10.1093/jhered/esab046>
- Bouyoucos, I.A.**-(2021)-Walking sharks cannot beat the heat.-*Conservation Physiology*, 9, Article coab035 <https://dx.doi.org/10.1093/conphys/coab035>
- Braccini, M. & Murua, H.**-(2021)-Quantifying shark and ray discards in Western Australia's shark fisheries.-*Marine and Freshwater Research*, *in press* <https://dx.doi.org/10.1071/mf21159>
- Branco-Nunes, I. & Niella, Y. & Hazin, F.H.V. & Creio, E. & de Oliveira, P.G.V. & Afonso, A.S.**-(2021)-Abundance dynamics of a new, endemic batoid from Brazil: The Lutz's stingray, *Hypanus berthalutzae*.-*Regional Studies in Marine Science*, 48, Article 102059 <https://dx.doi.org/10.1016/j.rsma.2021.102059>
- Brignon, A.**-(2021)-Historical and nomenclatural remarks on some megatoothed shark teeth (Elasmobranchii, Otodontidae) from the Cenozoic of New Jersey (U.S.A.)-*Rivista Italiana Di Paleontologia E Stratigrafia*, 127, 595–625.
- Bucair, N. & Francini, R.B. & Almeron-Souza, F. & Luiz, O.J.**-(2021)-Underestimated threats to manta rays in Brazil: Primacies to support conservation strategies.-*Global Ecology and Conservation*, 30, Article e01753 <https://dx.doi.org/10.1016/j.gecco.2021.e01753>
- Catalano, G. & Crobe, V. & Ferrari, A. & Baino, R. & Massi, D. & Titone, A. & Mancusi, C. & Serena, F. & Cannas, R. & Carugati, L. & Hemida, F. & Manfredi, C. & Melis, R. & Scarcella, G. & Sion, L. & Stagioni, M. & Tinti, F. & Cariani, A.-** (2021)-Strongly structured populations and reproductive habitat fragmentation increase the vulnerability of the Mediterranean starry ray *Raja asterias* (Elasmobranchii, Rajidae).-*Aquatic Conservation, Marine and Freshwater Ecosystems*, *in press* <https://dx.doi.org/10.1002/aqc.3739>
- Chatzispyrou, A. & Gubili, C. & Touloumis, K. & Karampetsis, D. & Kioulouris,**

- S. & Anastasopoulou, A. & Christidis, A. & Peristeraki, P. & Batjakas, I.E. & Koutsikopoulos, C.-**(2021)-Life-history traits of the marbled electric ray, *Torpedo marmorata* Risso, 1810, from the Greek Seas, north-eastern Mediterranean Sea.-*Environmental Biology of Fishes*, *in press* <https://dx.doi.org/10.1007/s10641-021-01174-9>
- Clua, E. & Buray, N. & Holler, R. & Kohnen, C.-**(2021)-First record of prickly shark *Echinorhinus cookei* (Pietschmann, 1928) (Chondrichthyes: Echinorhinidae) in French Polynesia (Eastern Tropical Pacific).-*Cybium*, 45, 251–253 <https://dx.doi.org/10.26028/cybium/2021-453-010>
- Corgos, A. & Rosende-Pereiro, A.-**(2021)-Nursery habitat use patterns of the scalloped hammerhead shark, *Sphyrna lewini*, in coastal areas of the central Mexican Pacific.-*Journal of Fish Biology*, *in press* <https://dx.doi.org/10.1111/jfb.14925>
- da Silva, C. & Kerwath, S.E. & Winker, H. & Lamberth, S.J. & Attwood, C.G. & Wilke, C.G. & Naesje, T.F.-**(2021)-Testing the waters to find the 'goldilocks' zone: fine-scale movement of *Mustelus mustelus* in relation to environmental cues.-*Marine and Freshwater Research*, *in press* <https://dx.doi.org/10.1071/mf20369>
- Diamant, S. & Pierce, S.J. & Rohner, C.A. & Graham, R.T. & d'Echon, A.G. & d'Echon, T.G. & Sourisseau, E. & Fidariisandratra, L.C. & Bakary, G. & Trelanche, S. & Andriananrisoa, F. & Kiszka, J.J.-**(2021)-Population structure, residency, and abundance of whale sharks in the coastal waters off Nosy Be, north-western Madagascar.-*Aquatic Conservation, Marine and Freshwater Ecosystems*, *in press* <https://dx.doi.org/10.1002/aqc.3743>
- Duarte, B. & Duarte, I.A. & Cacador, I. & Reis-Santos, P. & Vasconcelos, R.P. & Gameiro, C. & Tanner, S.E. & Fonseca, V.F.-**(2021)-Elemental fingerprinting of thornback ray (*Raja clavata*) muscle tissue as a tracer for provenance and food safety assessment.-*Food Control*, 133, Article 108592 <https://dx.doi.org/10.1016/j.foodcont.2021.108592>
- Dufflocq, P. & Larrain, M.A. & Araneda, C.-**(2021)-Species substitution and mislabeling in the swordfish (*Xiphias gladius*) market in Santiago, Chile: Implications in shark conservation.-*Food Control*, 133, Article 108607 <https://dx.doi.org/10.1016/j.foodcont.2021.108607>
- Duncan, W.P. & Machado, R.N. & Fernandes, M.N.-**(2021)-Environmentally-induced osmoregulation in Neotropical freshwater stingrays (Myliobatiformes: Potamotrygoninae) after controlling for phylogeny.-*Comparative Biochemistry and Physiology – Part A, Molecular & Integrative Physiology*, 262, Article 111076 <https://dx.doi.org/10.1016/j.cbpa.2021.111076>
- Estupinan-Montano, C. & Tamburin, E. & Delgado-Huertas, A.-**(2021)-New insights into the trophic ecology of the scalloped hammerhead shark, *Sphyrna lewini*, in the eastern tropical Pacific Ocean.-*Environmental Biology of Fishes*, *in press* <https://dx.doi.org/10.1007/s10641-021-01187-4>

- Filmalter, J.D. & Bauer, R.K. & Forget, F. & Cowley, P.D. & Dagorn, L.-**(2021)- Movement behaviour and fishery interaction of silky sharks (*Carcharhinus falciformis*) in the tropical tuna purse seine fishery in the Western Indian Ocean.- *ICES Journal of Marine Science*, 78, 2474–2485 <https://dx.doi.org/10.1093/icesjms/fsab119>
- Gajić, A.A. & Lelo, S. & Joksimović, A. & Pešić, A. & Tomanić, J. & Beširović, H. & Dragičević, B.**-(2021)-Contemporary records of the rare and critically endangered angular rough shark, *Oxynotus centrina* (Linnaeus, 1758), from the eastern Adriatic Sea.-*Journal of Fish Biology*, in press <https://dx.doi.org/10.1111/jfb.14932>
- Gonzalez-Pestana, A. & Silva-Garay, L. & Quiñones, J. & Mayaute, L. & Manrique, M. & Segura-Cobeña, E. & Espinoza, P. & Moscoso, V. & Ximena, V.-Z. & Alfaro-Shigueto, J. & Mangel, J.C.** -(2021)-Geographic and ontogenetic variation in the diet of two commonly exploited batoids (Chilean eagle ray and Pacific guitarfish) off Peru: evidence of trophic plasticity.-*Environmental Biology of Fishes*, in press <https://dx.doi.org/10.1007/s10641-021-01157-w>
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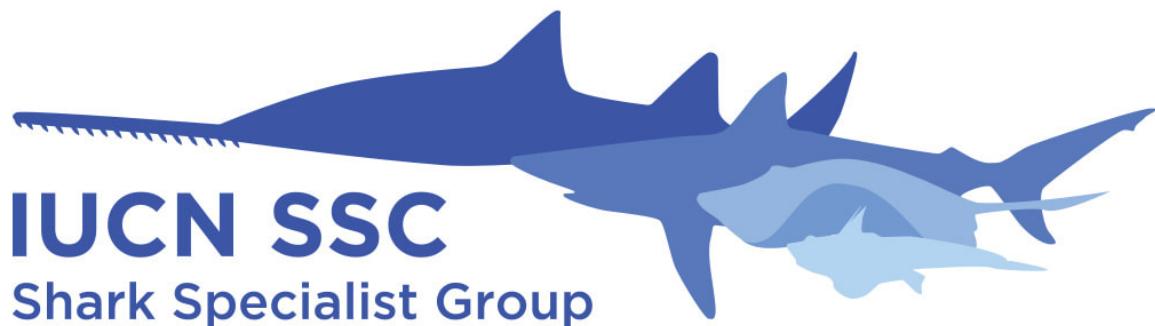
Jaws of defeat: Anglers' emotions toward shark depredation is key to conservation

Date: November 26, 2021

Source: University of Massachusetts Amherst

Summary: In a broad-scale study researchers quantified the emotional and behavioral responses to shark depredation in recreational fisheries. The study found that anglers, and especially recreational fishing guides, who experienced depredation were more likely to have a negative response towards sharks and were thus more likely to target sharks for additional harvesting.

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