

Lanternfishes (Myctophidae) collected by the German research vessel *Walther Herwig* in the Exclusive Economic Zones of Argentina and Uruguay.

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Abstract

The German research vessel *Walther Herwig* has conducted five expeditions to the Southwestern Atlantic Ocean between 1966 and 1981. During these cruises several dozens of stations were sampled within the Exclusive Economic Zones of Argentina and Uruguay, and thousands of myctophid specimens have been collected and later been deposited in the collection today housed at the Zoological Museum of Hamburg. These collection lots, mostly determined by the myctophid specialist Alexander Hulley or under his guidance, today represent the best available source to evaluate the status of myctophid species already included, or not, in the national lists of marine fishes from those countries. Based on specimens 29 myctophid species are confirmed for Argentina and 41 for Uruguay, including 8 and 19 first records. Remarks and conclusions on the status of the waters surrounding the Malvinas/Falkland Islands and the resulting consequences for the implementation of conservation measures are specified.

Resumen

El buque de investigación alemán *Walther Herwig* ha realizado cinco expediciones al Océano Atlántico Sudoeste entre 1966 y 1981. Durante estos viajes varias docenas de localidades dentro de las Zonas Económicas Exclusivas de Argentina y Uruguay fueron muestreadas, y miles de especímenes de myctófididos fueron colectados y posteriormente depositados en la colección que hoy se encuentra en el Museo de Zoología de Hamburgo. Estos lotes de colección, en la mayoría de los casos determinados por el especialista en myctófididos Alexander Hulley o bajo su conducción, hoy día representan la mejor fuente disponible para evaluar el estado de las especies myctófididos ya incluidos, o no, en las listas nacionales de peces marinos de aquellos países. Basado en especímenes se confirman 29 especies de myctófididos para Argentina y 41 para Uruguay, incluyendo 8 y 19 primeros registros. Se especifican comentarios y conclusiones sobre el estado de las aguas que rodean las Islas Malvinas/Falklands y las consecuencias resultantes para la implementación de medidas de conservación.

Introduction

Myctophids comprise over 250 species within 34 genera. They are distributed in all oceans and typically occupy a large vertical range from the surface to mesopelagic depths of 200 to 1.000 m. Lanternfishes (Myctophidae) and blackchins (Neoscopelidae) are the two families that compose the order of Myctophiformes, representing 65% of the deep-sea fish biomass and 20% of the overall marine ichthyofaunal biomass. During the nocturnal vertical migration towards the upper layers of the oceans both, the quantity of individuals and the density of the shoals can be so high that during the second World War the then recently developed sonar technology did indicate a false sea floor at daytime. During the 1971 expedition of the *Walther Herwig* a single haul yielded 15 tonnes of *Diaphus dumerilii* off Patagonia.

Lanternfishes have been given their common name because of their ability of emitting light from luminescent non-bacterial photophores arranged laterally and ventrally along the body (fig. 1). This illumination plays a roll in three different traits of the myctophids' life: 1) There may still be enough rest of sunlight reaching the oceans' twilight zones that predators could recognize the silhouette of potential prey from below. In this situation emitting a ventro-lateral counterillumination is a highly efficient camouflage strategy. 2) Members of the genus *Diaphus* possess head photophores next to their eyes which function as searchlights to find prey. 3) The quantity and arrangement of photophores are typical for each species, in some even show a

sexually dimorphism. This specific arrangement may help to unambiguously identify potential sexual partners from the own species.

If the myctophid photophores help to find food, not to become food, and to find a mate, then it is striking that a single morphological function supports the ultimate individual target in evolution: Survive long enough to leave a legacy in your populations's genepool.

Beyond the upper edge of the continental slope myctophids are an important source of food for seals, whales, squids, and bigger fishes. In the Southwest Atlantic Ocean their role in the trophic system is well investigated for the Scotia Sea, but for the EEZ-AR and EEZ-UY further north the only available source is the information on stomach contents in *Merluccius hake* (Angelescu & Cousseau 1969). Unfortunately there is no published information on deposited voucher specimens from this investigation available.



fig. 1 *Lobianchia dofleini* (Zugmayer, 1911). Drawing by Emma Kissling, a scientific illustrator who worked for the Prince of Monaco and completed illustrations of marine species. Her work was published in *Poissons provenant des campagnes du yacht Princesse-Alice*. Image and legend retrieved from Wikimedia Commons.

Strictness in precise localities

All kinds of conservation measures require jurisdictional range and thus, national species lists must be reduced to confirmed findings from within the current political borders of the respective country, including its maritime limits. Beyond a country's own jurisdictional range the monitoring of a species' status is difficult and a consistent implementation of management plans for threatened species is nearly impossible.

The inclusion of records from international waters or from neighbor countries' *Exclusive Economic Zones*, as well as the special case of the *Common Fishing Zone of Argentina and Uruguay* have been recently addressed by Koerber (2023). Another aspect to be considered is the maritime zone surrounding the Malvinas/Falkland Islands. Although by Argentina considered to be part of its own territory, as a matter of fact this area today is beyond the range of Argentina's jurisdiction.

In the present contribution this zone is entitled Fisheries Conservation Zone of the Falklands Islands, herein encoded FCZ-FK, compound of the interim and outer zones, FICZ and FOCZ, and for two reasons treated as separate from the EEZ-AR:

In a first place the structure of the ZMH collection database is being maintained. Within the respective ZHM dataset in column 'country' the entries follow the 2-letter-code defined in ISO 3166, in which for areas as Malvinas/Falkland or South Georgia & South Sandwich Islands individual codes as FK and GS are available and those territories are not included under AR, nor under GB. Nevertheless, several collection sites located on the Burdwood Bank have been corrected from FK to AR. The collections of the *Walther Herwig* in the Southwest Atlantic Ocean started in 1966, even before Argentina had defined its maritime limits as we know them today and long before the declaration of the FCZ-FK. These historical changes may have caused the detected inconsistencies in that dataset.

The second reason is that the beginning of this dispute dates back to 1833 without having been solved yet. But conservation of biodiversity cannot wait for another century, not even for decades or only years. Thus, while for this area the current *status quo* persists, the responsibilities and obligations arising from the *Convention on Biological Diversity* (CBD) are to be taken by e.g. the Administration of the British Overseas Territories and, in consequence, for the time being separated species lists for EEZ-AR and FCZ-FK are more constructive as correct national faunal lists are a first necessary step towards a successful monitoring and management of biodiversity.

This provisional practice of separating biodiversity inventories for mere conservation purposes shall by no means be understood as a statement against the claim of Argentina to gain sovereignty over the Malvinas/Falkland Islands.

Strictness in evidence-based records

In natural sciences results must be reproducible. There should be no space for assumptions on e.g. applied standards or experimental setups. Although it has become a broadly accepted standard to deliver this information in the methods' section of taxonomic works, this practice usually is set aside in biological inventories. In many cases the authors provide no references at all about their sources, in others the references lead to further works without information that would allow reproducibility by naming the voucher specimen deposited in a collection and thus, enable later researchers to examine and eventually redetermine specimens.

A suitable example for the confusion that can be generated by references missing voucher specimens is the case of *Peprilus paru*. This species has been indicated for Argentina and Uruguay since the work of Berg (1895) and ever since been repeated in subsequent works from these countries. In 2011 Marzeniuk et al. revalidated both, *Peprilus crenulatus* and *Seserinus xanthurus*, from the synonymy with *Peprilus paru* and concluded that the real *P. paru* is distributed in the Caribbean and the Gulf of Mexico, while the two revalidated taxa are sympatric off Uruguay and Argentina. As no voucher specimens are known for most mentions of '*P. paru*' made between 1895 (Berg) and current times (Nion 2016; Cousseau & Rosso 2019) an assignment of these records to either of the two revalidated species is arbitrary.

As a result of a thorough taxonomic revision such a situation may occur in any group of organisms and in consequence all records not based on voucher specimens may be treated as doubtful for a specific area.

Only for organisms too large for being transported or preserved in collections, photo evidence may be acceptable to replace voucher specimens. This may be the case for big sharks, rays, or molid species, provided that the photos show the characters necessary to identify the respective species undoubtedly.

Available myctophid voucher material

Under the expectation of the above mentioned double strictness regarding localities and reproducibility, the inclusions of myctophids from Argentina and Uruguay in the respective most recent national lists are inadequately justified or not traceable at all. Mabragaña & Cousseau (2021) mentioned 38 myctophid species for Argentina, for which the chains of provided references in only three cases lead to published voucher specimens from the EEZ-AR (table 1, figs. 2, 3). Nion et al (2016) did not provide any references in their list of 36 myctophid species from Uruguay and hence, for this country's EEZ there is no possible reproducibility whatever. Only for two species, *Diaphus meadi* and *Protomyctophum choriodon*, reproducibility could not be better (see 'criteria' below) as type specimens have been obtained in the EEZ-UY. Nevertheless, the Uruguayan distribution of *D. meadi* had been overlooked by Nion et al. 2016 (Koerber 2023).

In difference to national inventories which cover a vast diversity of marine fishes, more detailed information could be expected from topical works on taxonomic groups. For myctophids from the Atlantic the best available source is still to be found in the contribution of Hulley (1981) and for the circumglobal southern myctophids in the thesis of McGinnis (1974), later made available in a published work (1982).

Hulley's monograph was based on 129.433 myctophid specimens collected by the *Walther Herwig* in the Atlantic during several cruises conducted between 1966 and 1976. Dozens of the respective *Walther Herwig* stations are located within EEZ-AR, EEZ-UY, and FCZ-FK (table 2). The mere quantity of specimens unfortunately did not allow to include a list of examined material in Hulley (1981) and, due to the restricted available space at the ISH collection, also lead a dispersion of specimens to other collections as e.g. AMS, NHMD, USNM, and ZMUC. All specimens collected during the cruises from 1966 to 1971 have been first determined by Krefft and in 1973 were redetermined by Hulley (Hulley, pers.comm.). Anyhow, the determiner of each collection lot mentioned in the below species accounts is maintained as indicated in the ZMH dataset.

The collection of fishes housed at ISH has been transferred to ZMH in 1993, when ISH moved from Hamburg to Bremen to become part of the Thünen Institute. With 4.838 collection lots the Myctophidae now is the best represented family of Actinopterygii in the ZMH collection (Thiel et al. 2009).

For his work on the myctophids from South of 30°S, McGinnis (1974, 1982) has examined specimens collected by the research vessels *Eltanin*, *Discovery*, and *William Scoresby*. For the included species he has provided the stations where these had been collected (table 3), but, unfortunately and just as Hulley, not the collection lots of voucher specimens. Therefor the accounts from McGinnis are all included only under the third category of 'localities'. Anyhow, the researches of these three vessels are so well documented that the specimens examined by McGinnis are most probably still available in the respective collections and future reexamination of these lots could lead to confirmations of some species listed below as yet unconfirmed for EEZ-AR and/or EEZ-UY.

From all species included in the below accounts, *Lampanyctus wisneri* (Zahuranec, 2000) is the only one described after the publication of Hulley (1981). For two lots of non-type specimens from the EEZ-AR the very author of the species, Zahuranec, is given as the determiner, indicating that he has examined myctophids at the ZMH collection. In reverse conclusion it can be assumed that the determinations of all other lots listed below are still valid from the determinations of Hulley and/or staff of ISH.

In addition to the already mentioned vessels myctophids have been reported from some cruises of Soviet vessels, but all these are located within the FCZ-FK (table 3, figs. 10, 11) and the respective specimens are probably still available in Russian collections.

Conclusion & outlook

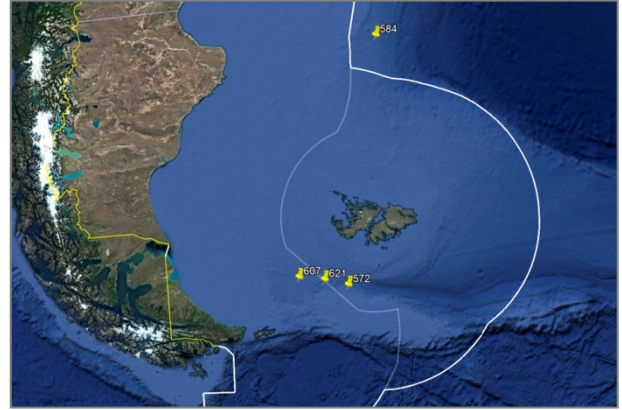
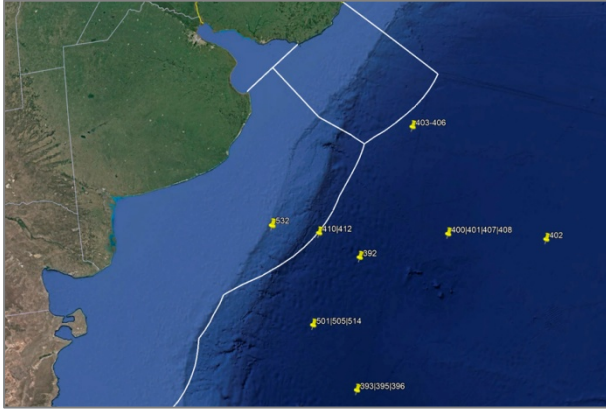
The so far described circumstances regarding myctophids from off Argentina and Uruguay can be summarized as follows:

- The most recent national lists on marine fishes of Argentina and Uruguay, with the exception of only three cases for Argentina, do not allow reproducibility regarding exact localities within the respective EEZ, nor regarding known voucher specimens available for redetermination.
- No other research vessel has conducted so many collections of myctophid specimens from so many stations within the maritime boundaries of Argentina, Uruguay, and the Malvinas/Falkland Islands as the *Walther Herwig* did.
- No other collection houses more myctophid specimens from this area than ZMH with the advantage that these have all been determined or redetermined by specialists on myctophids as e.g. Hulley and Zahuranec.

Considering these combined aspects, the collection of myctophids done by the *Walther Herwig* should be seen as the currently best available source and the below species accounts be treated as the best opportunity for a new zero-line for future inclusions of myctophids in the biodiversity inventories of Argentina and Uruguay. There are probably hundreds of so far unpublished voucher specimens deposited in the collections around the globe still awaiting to become part of new research results and with the present contribution we have hopefully not heard the last word in this issue. Any correction of or addition to the present list will help to improve our knowledge on the species of Myctophidae and to better justify inclusions in national inventories of biodiversity or, in case of differing redetermination, prove a below included account to be erroneous and eventually remove a species from such a list.

Table 1. Species of myctophid specimens deposited at INIDEP and their respective collection localities as publicly available from Cousseau et al. (2012, 2020) and GBIF (Cousseau & Lertora 2018).

species	INIDEP	locality	area	determiner
<u>from Cousseau et al. (2012)</u>				
<i>Electrona carlsbergi</i>	607	53°27'S 62°46'W	EEZ-AR	
<i>Gymnoscopelus bolini</i>	584	46°53'S 59°54'W	international waters	
<i>Gymnoscopelus nicholsi</i>	412	40°29'S 54°26'W	international waters	
<i>Gymnoscopelus nicholsi</i>	621	53°30'S 61°38'W	EEZ-AR	
<i>Gymnoscopelus piabilis</i>	396	44°57'S 53°01'W	international waters	
<i>Gymnoscopelus piabilis</i>	407	40°29'S 49°33'W	international waters	
<i>Metelectrona ventralis</i>	514	43°05'S 54°39'W	international waters	
<i>Protomyctophym tensioni</i>	400	40°29'S 49°33'W	international waters	
<i>Protomyctophym tenisoni</i>	572	53°37'S 60°34'W	FCZ-FK	
<u>from Cousseau & Lertora (2018)</u>				
<i>Ceratoscopelus warmingii</i>	402	40.5°S 45.8°W	international waters	Topal
<i>Diaphus hudsoni</i>	393	45.0°S 53.0°W	international waters	Topal
<i>Lampadena notialis</i>	505	43.1°S 54.7°W	international waters	Figuerola & Díaz de Astarloa
<i>Lampichthys procerus</i>	392	41.2°S 52.9°W	international waters	Jasykova
<i>Lampichthys procerus</i>	405	37.5°S 51.0°W	international waters	Topal
<i>Lepidophanes guentheri</i>	401	40.5°S 49.6°W	international waters	Jasykova
<i>Protomyctophym choriodon</i>	410	40.5°S 54.4°W	international waters	Topal
<i>Scopelopsis multipunctatus</i>	404	37.5°S 51.0°W	international waters	Topal
<i>Symbolophorus barnardi</i>	405	37.5°S 51.0°W	international waters	Topal
<i>Symbolophorus boops</i>	395	45.0°S 53.0°W	international waters	Topal
<i>Symbolophorus boops</i>	403	37.5°S 51.0°W	international waters	Díaz de Astarloa & Figuerola
<i>Symbolophorus boops</i>	408	40.5°S 49.6°W	international waters	Jasykova
<i>Symbolophorus boops</i>	501	43.1°S 54.7°W	international waters	Díaz de Astarloa & Figuerola
<u>from Cousseau et al. (2020)</u>				
<i>Lampadena speculigera</i>	532	40°16'S 56°08'W	EEZ-AR	



figs. 2, 3 Collection localities of myctophid specimens deposited at INIDEP as publicly available from Cousseau et al. (2012, 2020) and GBIF (Cousseau & Lertora 2018) in/off the northern (left) and southern part (right) of the EEZ-AR, EEZ-UY, and FCZ-FK. Images differ in scale.

fig. 4 (right)
Collection sites of myctophids by the *Walther Herwig* in the EEZ-UY.



figs. 5,6
Collection sites of myctophids by the *Walther Herwig* off the province of Buenos Aires in 1966 (below left) and during later cruises (below right). The star indicates the city of Mar del Plata.

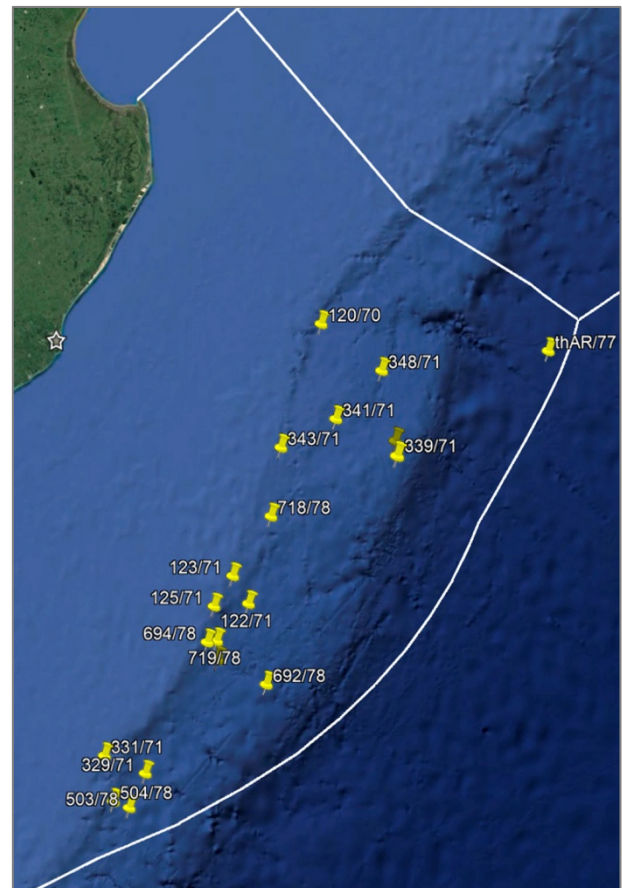


Table 2. Collection sites of myctophids by the *Walther Herwig* as mentioned in the species accounts section below.

station	position	date	depth m	remarks
EEZ-UY				
197/66	35°56'S 52°33'W	30.May.1966	480-70	1966
208/66	35°02'S 52°12'W	08.Jun.1966	260-265	
230/66	35°04'S 52°15'W	12.Jun.1966	600	
232/66	35°13'S 52°24'W	12.Jun.1966	400	
237/66	36°00'S 52°58'W	13.Jun.1966	800	
EEZ-AR				
253/66	37°49'S 55°00'W	15.Jun.1966	400	
261/66	38°58'S 55°27'W	18.Jun.1966	500	
268/66	39°56'S 55°58'W	19.Jun.1966	600	
269/66	39°56'S 55°54'W	19.Jun.1966	800	
271/66	41°00'S 56°57'W	20.Jun.1966	1000	
273/66	40°42'S 56°38'W	20.Jun.1966	800	
274/66	40°41'S 56°41'W	20.Jun.1966	600	
276/66	40°52'S 56°42'W	20.Jun.1966	400	
277/66	40°54'S 56°49'W	20.Jun.1966	300	
278/66	40°57'S 56°52'W	20.Jun.1966	200	
FCZ-FK				
317/66	48°16'S 60°12'W	26.Jun.1966	400	
335/66	52°04'S 56°59'W	30.Jun.1966	430	
EEZ-AR				
387/66	39°45'S 55°51'W	21.Jul.1966	400	
391/66	38°53'S 55°22'W	21.Jul.1966	400	
EEZ-UY				
417/66	35°47'S 52°52'W	26.Jul.1966	270	
424/66	35°35'S 52°35'W	27.Jul.1966	270	
429/66	34°54'S 52°05'W	28.Jul.1966	280	
EEZ-UY				
30/68	36°37'S 51°32'W	16.Feb.1968	2000-0	1968
EEZ-AR				
121/70	37°44'S 54°43'W	31.Dec.1970	800	1970 also seen as 121/71
EEZ-AR				
122/71	40°00'S 55°49'W	01.Jan.1971	800	1971
123/71	39°48'S 55°58'W	01.Jan.1971	502	
125/71	40°01'S 56°09'W	01.Jan.1971	250	
143/71	43°35'S 59°20'W	05.Jan.1971	800	
144/71	43°35'S 59°20'W	05.Jan.1971	505	
145/71	43°39'S 59°20'W	05.Jan.1971	350	
146/71	43°43'S 59°25'W	05.Jan.1971	250	
FCZ-FK				
219/71	49°58'S 55°00'W	23.Jan.1971	1000	
227/71	52°02'S 55°20'W	25.Jan.1971	1225	
228/71	51°56'S 56°17'W	25.Jan.1971	1000	
229/71	52°04'S 56°45'W	25.Jan.1971	800	
EEZ-AR				
232/71	54°46'S 62°30'W	02.Feb.1971	800	
238/71	54°58'S 59°22'W	03.Feb.1971	775	
239/71	54°53'S 59°00'W	03.Feb.1971	1000-1200	
240/71	54°56'S 58°05'W	03.Feb.1971	1250	
FCZ-FK				
241/71	55°00'S 57°50'W	04.Feb.1971	812	
251/71	53°44'S 59°54'W	05.Feb.1971	500	
269/71	49°00'S 60°52'W	09.Feb.1971	445	
295/71	48°54'S 56°52'12"W	14.Feb.1971	830	
EEZ-AR				
329/71	41°13'S 56°51'W	22.Feb.1971	1250	
331/71	41°05'S 57°15'W	23.Feb.1971	800	
339/71	54°33'S 59°00'W	25.Feb.1971	1207	
340/71	38°50'S 54°25'W	25.Feb.1971	1000	
341/71	38°41'S 54°59'W	25.Feb.1971	800	
343/71	38°53'S 55°30'W	26.Feb.1971	350	
348/71	38°20'S 54°33'W	05.Mar.1971	997-1040	

EEZ-AR				1977
thAR/77	38°10'S 52°59'W	01.Nov.1977	2750	trial haul
EEZ-AR				1978
503/78	41°27.9'S 57°01.1'W	09.May.1978	950	
504/78	41°25'S 57°10'30"W	09.May.1978	800-810	mean of haul 41°24'-26'S 57°10'-11'W
517/78	42°54'52"S 58°47.1'W	12.May.1978	940	
518/78	42°51'S 58°48'W	12.May.1978	785	
FCZ-FK				
552/78	48°22.6'S 59°14.9'W	20.May.1978	781	
575/78	50°43'18"S 56°01'W	25.May.1978	770	
579/78	51°46.7'S 56°45.3'W	26.May.1978	480	
EEZ-AR				
590/78	54°38'30"S 61°45'30"W	28.May.1978	940-960	mean of haul 54°39'-38'S 61°44'-47'W
FCZ-FK				
636/78	49°23.5'S 56°37.6'W	13.Jun.1978	630	
638/78	49°29.8'S 58°56.6'W	14.Jun.1978	400	
EEZ-AR				
675/78	43°52'42"S 59°34'48"W	22.Jun.1978	660	
676/78	43°48'S 59°32'W	22.Jun.1978	520-570	
692/78	40°34.8'S 55°38.6'W	26.Jun.1978	1530	
693/78	40°23'54"S 56°07'12"W	26.Jun.1978	1040-940	
694/78	40°16'24"S 56°13'12"W	26.Jun.1978	660-690	
EEZ-UY				
700/78	36°51.8'S 53°53.05'W	06.Jul.1978	770-800	mean of haul 36°52.4'-51.2'S 53°54.1'-52'W
703/78	35°49.2'S 52°49.7'W	17.Jul.1978	750	
707/78	36°18'S 53°19'W	18.Jul.1978	720	
EEZ-AR				
718/78	39°22.5'S 55°35.8'W	20.Jul.1978	535	
719/78	40°15'54"S 56°07'42"W	21.Jul.1978	975	
FCZ-FK				
769/78	48°21.9'S 60°35.1'W	02.Aug.1978	350	
817/78	54°34.1'S 55°53.5'W	18.Aug.1978	435	
821/78	53°33.7'S 60°46.9'W	19.Aug.1978	730	
822/78	52°28.6'S 57°01.8'W	20.Aug.1978	690	
868/78	50°13.5'S 57°07.4'W	31.Aug.1978	400	
871/78	49°07.4'S 59°16.4'W	01.Sep.1978	485	
872/78	48°48.4'S 59°09.7'W	01.Sep.1978	630	
873/78	48°44'S 59°31'W	01.Sep.1978	540	
874/78	48°34.6'S 59°05.5'W	01.Sep.1978	900	
EEZ-AR				
902/78	43°59'S 59°42.8'W	08.Sep.1978	600	
903/78	43°49'S 59°31'W	08.Sep.1978	845	
905/78	43°23.4'S 59°17.5'W	08.Sep.1978	605	
906/78	42°57.7'S 59°41.6'W	08.Sep.1978	110	
EEZ-AR				1981
318/81	54°27.2'S 62°19.3'W	01.Feb.1981	125	

fig. 7
Collection sites of myctophids
by the *Walther Herwig* off the
province of Chubut



fig. 8 (right)
Collection sites of myctophids by the *Walther Herwig* in the FCZ-FK.

fig. 9 (below)
Collection sites of myctophids by the *Walther Herwig* in the extreme South of EEZ-AR.

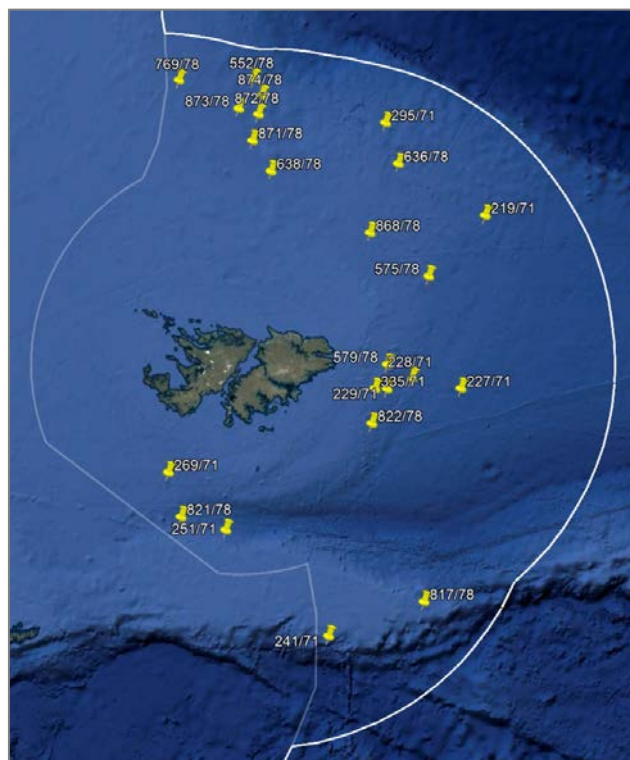
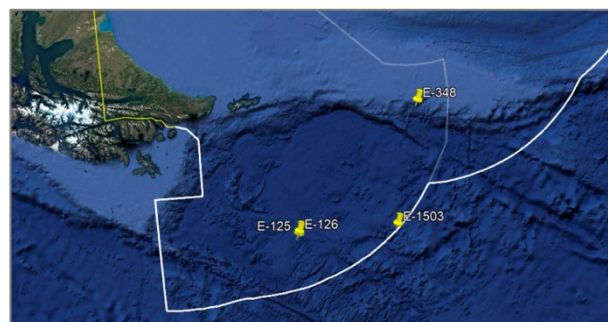


Table 3. Collection sites of further foreign research vessels as mentioned in the species accounts section below.

station	position	date	depth m	maritime territory/remarks
Atlantis II, USA				
1441	36°45'S 53°06'W	19.Mar.1967	190-0	EEZ-UY
Discovery, Great Britain				
60	50°45'S 56°33'W	21.May.1926	-	FCZ-FK
62	49°22'S 54°48'W	22.May.1926	-	FCZ-FK
217	58°27'30"S 67°55'W	18.Apr.1927	2000-0	EEZ-CL
Eltanin, USA				
125	57°14'S 62°46'W	29.Jul.1962	1830-0	EEZ-AR
126	57°12'S 62°45'W	29.Jul.1962	3806-0	EEZ-AR
348	54°52.95'S 59°01.55'W	04.Dec.1962	896	EEZ-AR
1503	57°04'S 59°33'W			EEZ-AR
Gizhiga, USSR				
07/84	48°53'S 58°38'W	25.Nov.1984	650	FCZ-FK
Kurchatov, USSR				
928	52°18'S 56°31'W	17.Dec.1971	1105-0	FCZ-FK
William Scoresby, Great Britain				
216	47°37'S 60°50'W	01.Apr.1928	219-133	EEZ-AR
Zund, USSR				
120	48°08'S 58°36'W	25.Nov.1984	650	FCZ-FK



figs. 10, 11 Collection localities of myctophid specimens by foreign vessels from table 3 (without *Atlantis II* 1441 in EEZ-UY).

Methods

Each species is listed under the currently valid name, followed by a list of synonyms which includes the original combination used in the description (Fricke et al. 2024).

For each species the general distribution is given as indicated by Hulley (1981) and Fricke et al. (2024). Then for each area (EEZ-AR, EEZ-UY, and FCZ-FK) all so far known references are provided, followed by the *Walther Herwig* specimens from an area, as well as a final comment on the status of this species for the respective area. For each lot of specimens the collection number, the *Walther Herwig* station where the specimens have been collected, and the determiner are provided. Voucher specimens or localities from international waters have only been included if treated as source other authors have referred to. To visually separate these clearly from the occurrences within national areas, such international accounts have been put in grey writing in order to express the minor importance.

If available, vernacular names have been taken from Fishbase. Common names set in brackets are being proposed herein.

During the preparation of this contribution the focus has been clearly on the Exclusive Economic Zones of Argentina and Uruguay and as much literature as possible from or about these countries has been obtained and checked. There is no doubt that for the FCZ-FK a lot of literature has not been considered yet, especially difficult to obtain technical reports. Hence, all results for the FCZ-FK are rather tentative side-products, still worth to be mentioned in the current context.

Collection acronyms & abbreviations

- AMS Australian Museum, Sydney
- APF Antarctic Polar Front
- CBD Convention on Biological Diversity
- EEZ-AR Exclusive Economic Zone of Argentina
- EEZ-CL Exclusive Economic Zone of Chile
- EEZ-UY Exclusive Economic Zone of Uruguay
- FCZ-FK Fisheries Conservation Zone of Malvinas/Falkland Islands
- FSFL now FSFRL, National Research Institute of Far Seas Fisheries, Shimizu, Japan
- INIDEP Instituto Nacional de Investigación y Desarrollo Pesquero, Mar del Plata, Argentina
- ISH Institut für Seefischerei, Hamburg. Collection now at ZMH↑
- N North
- NHMD Natural History Museum of Denmark, Copenhagen
- S South
- STC Subtropical Convergence
- SW Southwest
- USNM United States National Museum, Smithsonian, Washington
- W West
- WH *Walther Herwig*, former German research vessel
- ZIN Zoological Institute, St. Petersburg, Russia
- ZMH Zoological Museum of Hamburg, Germany
- ZMUC Zoological Museum, University of Copenhagen, Denmark. Now NHMD↑

Criteria for published records in descending grade of reliability

- type localities Published records of holotypes, paratypes or any other kind of type specimens of either the nominal species or a synonym collected in the respective maritime territory.
- non-type specimens Records of either the nominal species or a synonym collected in the respective area which have been published including a collection number of voucher specimens.
- localities Records of either the nominal species or a synonym collected in the respective area which have been published providing details on the locality of collection, but without including a collection number of voucher specimens.
- mere listings Published mentions, e.g. in faunal lists, of either the nominal species or a synonym for the respective area without providing details as the locality of collection and a collection number of voucher specimens.
- miscellaenea Published statements or opinions that a species is not to be found in a respective area or general statements on the distribution of a species in the SW Atlantic Ocean without further details.

Table 4. Occurrence of Myctophidae in the treated areas. Type specimens marked with red circles, non-type specimens in green, and records as localities or mere mentions, both not corroborated by specimens, in white. Stars indicate first records for Argentina or Uruguay presented herein.

	AR	UY	FK
Gymnoscopelinae			
<i>Gymnoscopelus</i>			
<i>G. bolini</i>	●	●	●
<i>G. braueri</i>	●		●
<i>G. fraseri</i>	★		●
<i>G. hintonoides</i>	●		
<i>G. microlampas</i>	★		●
<i>G. nicholsi</i>	●	●	●
<i>G. opisthopterus</i>	●		
<i>G. piabilis</i>	●	●	●
<i>Lampichthys</i>			
<i>L. procerus</i>	●	●	
<i>Notoscopelus</i>			
<i>N. caudispinosus</i>	○	○	
<i>N. resplendens</i>	○	●	
<i>Scopelopsis</i>			
<i>S. multipunctatus</i>	○	●	
Notolychninae			
<i>Notolychnus</i>			
<i>N. valdiviae</i>	○	○	
Lampanyctinae			
<i>Bolinichthys</i>			
<i>B. indicus</i>	○	○	
<i>B. photothorax</i>	○	○	
<i>B. supralateralis</i>	○	○	
<i>Ceratoscopelus</i>			
<i>C. maderensis</i>	○	○	
<i>C. warmingii</i>	○	●	
<i>Lampadena</i>			
<i>L. chavesi</i>	○	○	
<i>L. luminosa</i>	○	●	
<i>L. notialis</i>	●	●	
<i>L. speculigera</i>	●		
<i>Lampanyctus</i>			
<i>L. achirus</i>	●	★	●
<i>L. ater</i>	○	●	
<i>L. australis</i>	●	●	
<i>L. festivus</i>		★	
<i>L. intricarius</i>	★	★	
<i>L. lepidolychnus</i>	●	★	
<i>L. lineatus</i>	○	○	
<i>L. macdonaldi</i>	★		●
<i>L. nobilis</i>		★	
<i>L. pusillus</i>		★	
<i>L. wisneri</i>	★		
<i>Lepidophanes</i>			
<i>L. gaussi</i>		★	
<i>L. guentheri</i>	○	●	
<i>Taaningichthys</i>			
<i>T. bathyphilus</i>	○	○	
Diaphinae			
<i>Diaphus</i>			
<i>D. anderseni</i>		★	
<i>D. bertelseni</i>	○	○	
<i>D. dumerilii</i>	○	●	
<i>D. effulgens</i>		★	
<i>D. hudsoni</i>	○	●	
<i>D. meadi</i>	○	●	
<i>D. metopoclampus</i>	○	●	
<i>D. mollis</i>		★	
<i>D. perspicillatus</i>		★	
<i>D. subtilis</i>		★	
<i>D. vanhoeffeni</i>		★	
<i>Lobianchia</i>			
<i>L. dofleini</i>	○	○	
Myctophinae			
<i>Centrobranchus</i>			
<i>C. nigroocellatus</i>	○	○	
<i>Dasyscopelus</i>			
<i>D. obtusirostris</i>	○	○	
<i>D. selenops</i>		★	
<i>Diogenichthys</i>			
<i>D. atlanticus</i>		★	
<i>Electrona</i>			
<i>E. antarctica</i>	○		
<i>E. carlsbergi</i>	●		
<i>E. subaspera</i>	●	●	●
<i>Hygophum</i>			
<i>H. hanseni</i>	○	●	
<i>H. hygomii</i>	○	★	
<i>H. reinhardtii</i>		★	
<i>Krefflichthys</i>			
<i>K. anderssoni</i>	●		●
<i>Metelectrona</i>			
<i>M. ventralis</i>	●	★	
<i>Myctophum</i>			
<i>M. affine</i>	○	●	
<i>Protomyctophum</i>			
<i>P. andriashevi</i>	★		
<i>P. bolini</i>	●		
<i>P. choriodon</i>	●	●	●
<i>P. gemmatum</i>	★		
<i>P. luciferum</i>	★	★	●
<i>P. normani</i>	●	○	
<i>P. parallelum</i>	○		
<i>P. tensioni</i>	○	○	●
<i>Symbolophorus</i>			
<i>S. barnardi</i>	●	●	
<i>S. boops</i>	●	●	●

	AR	UY	FK
type specimens	●	2	
non-type specimens	●★	29	39
unconfirmed	○	29	15
new first records	★	8	19

order **MYCTOPHIFORMES**

family **Myctophidae**

subfamily Gymnoscopelinae

Gymnoscopelus Günther, 1873

G. bolini Andriashev, 1962

Grand lanternfish

Gymnoscopelus bolini Andriashev, 1962

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...circumglobal distribution between the Subtropical Convergence and the Antarctic Convergence ... in the South Atlantic west of 07°30'W between about 40°S and 58°S, although west of 40°W its northern limit lies at about 36°S. o Fricke et al. (2024): southern circumglobal 																																																			
<u>EEZ-AR</u>	references	localities in EEZ-AR: <ul style="list-style-type: none"> o Stehmann & Schulze (1996): <i>Walther Herwig</i> 340/71, 693/78 mere listings for Argentina: <ul style="list-style-type: none"> o Menni et al. (1984): ref. to Angelescu & Cousseau (1969) o Chebez & Padilla (1999) o Cousseau & Rosso (2019) o Cousseau et al. (2020): ref. to Gon & Heemstra [> Hulley 1990] and Figueroa et al. (1998) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020) non-type specimens from international waters: <ul style="list-style-type: none"> o Cousseau et al. (2012): INIDEP 584, 46°53'S 59°54'W miscellanea: <ul style="list-style-type: none"> o Angelescu & Cousseau (1969): stomach content of <i>Merluccius hubbsi</i>, no distinct locality, no mentioned voucher specimens o Hulley (1990): Generally, between APF and STC, with northern extension to about 38 °S off Argentina, to 40°S off Chile... 																																																			
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr><td>o 104606</td><td>273/66</td><td>Hulley</td></tr> <tr><td>o 104608</td><td>274/66</td><td>Krefft</td></tr> <tr><td>o 104612</td><td>269/66</td><td>Krefft</td></tr> <tr><td>o 104836</td><td>271/66</td><td>Krefft</td></tr> <tr><td>o 107888</td><td>144/71</td><td>Krefft</td></tr> <tr><td>o 107893</td><td>143/71</td><td>Krefft</td></tr> <tr><td>o 107777</td><td>121/70</td><td>Hulley</td></tr> <tr><td>o 107891</td><td>122/71</td><td>Krefft</td></tr> <tr><td>o 108105</td><td>341/71</td><td>Krefft</td></tr> <tr><td>o 108107</td><td>339/71</td><td>Hulley</td></tr> <tr><td>o 108123</td><td>340/71</td><td>Krefft</td></tr> <tr><td>o 108518</td><td>348/71</td><td>Hulley</td></tr> <tr><td>o 115199</td><td>thAR/77</td><td>Krefft</td></tr> <tr><td>o 115376</td><td>517/78</td><td>Krefft</td></tr> <tr><td>o 115836</td><td>902/78</td><td>Krefft</td></tr> <tr><td>o 115839</td><td>903/78</td><td>Krefft</td></tr> <tr><td>o 115842</td><td>905/78</td><td>Krefft</td></tr> </table>	o 104606	273/66	Hulley	o 104608	274/66	Krefft	o 104612	269/66	Krefft	o 104836	271/66	Krefft	o 107888	144/71	Krefft	o 107893	143/71	Krefft	o 107777	121/70	Hulley	o 107891	122/71	Krefft	o 108105	341/71	Krefft	o 108107	339/71	Hulley	o 108123	340/71	Krefft	o 108518	348/71	Hulley	o 115199	thAR/77	Krefft	o 115376	517/78	Krefft	o 115836	902/78	Krefft	o 115839	903/78	Krefft	o 115842	905/78	Krefft
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	status	Evidence-based confirmation of previous records from EEZ-AR.																																																			
<u>EEZ-UY</u>	references	localities in EEZ-UY: <ul style="list-style-type: none"> o Hulley (1989): <i>Walther Herwig</i> 703/78 mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016) 																																																			
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr><td>o 104610</td><td>237/66</td><td>Krefft</td></tr> <tr><td>o 115667</td><td>703/78</td><td>Krefft</td></tr> </table>	o 104610	237/66	Krefft	o 115667	703/78	Krefft																																													
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o 115667	703/78	Krefft																																																			
	status	Evidence-based confirmation of previous records from EEZ-UY.																																																			
<u>FCZ-FK</u>	references	non-type specimens from FCZ-FK: <ul style="list-style-type: none"> o Balushkin & Prirodina (2020): ZIN 49407, <i>Gizhiga</i> 07/84 localities from FCZ-FK: <ul style="list-style-type: none"> o Figueroa et al. (1998): 53°37'S 60°34'W mere listings for Malvinas/Falkland Islands: <ul style="list-style-type: none"> o Coggan et al. (1996) 																																																			
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr><td>o 107917</td><td>227/71</td><td>Krefft</td></tr> <tr><td>o 108127</td><td>295/71</td><td>Krefft</td></tr> </table>	o 107917	227/71	Krefft	o 108127	295/71	Krefft																																													
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o 108127	295/71	Krefft																																																			

- o 108130 241/71 Krefft
- o 115375 552/78 Krefft
- o 115542 637/78 Krefft

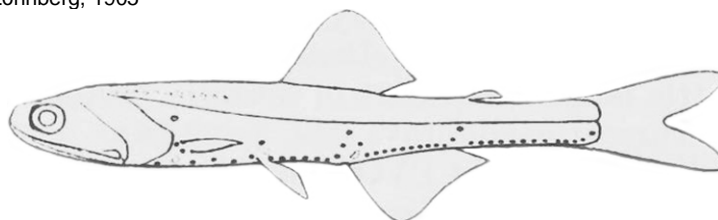
status Previous records from FCZ-FK are confirmed.

G. braueri (Lönnerberg 1905)

Brauer's lanternfish

Myctophum braueri Lönnerberg, 1905

Gymnoscopelus braueri (Lönnerberg 1905)
Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): ...circumglobally distributed in antarctic waters south of the Antarctic Convergence ... in the western South Atlantic has been taken north of the Subtropical Convergence at 34° 04' S 47°46'W, due to the influence of the Falkland Current...
 - o Fricke et al. (2024): circumglobal in Southern Hemisphere

EEZ-AR

- references localities in EEZ-AR:
- o McGinnis (1974, 1982): *Eltanin* 125

- specimens NHMD collection:
- o 1575209-13 348/71 Nielsen
- USNM collection:
- o 206612 348/71 Hulley
- ZMH collection:
- o 107999 329/71 Krefft
 - o 108010 239/71 Krefft
 - o 108014 240/71 Krefft
 - o 108023 339/71 Krefft
 - o 108599 348/71 Hulley
 - o 115538 692/78 Krefft
 - o 115539 693/78 Krefft
 - o 115665 719/78 Krefft
 - o 120191 318/81 Krefft

status Evidence-based confirmation of previous records from EEZ-AR.

FCZ-FK

- references localities from FCZ-FK:
- o Parin et al. (1974): *Kurchatov* 928
 - o McGinnis (1974, 1982): *Discovery* 62
- mere listings for Malvinas/Falkland Islands:
- o Coggan et al. (1996)

- specimens ZMH collection:
- o 107846 195/71 Stehmann
 - o 107851 219/71 Krefft
 - o 107854 229/71 Krefft
 - o 107864 227/71 Krefft
 - o 107896 228/71 Krefft
 - o 108007 295/71 Krefft
 - o 108019 241/71 Krefft
 - o 115726 821/78 Krefft

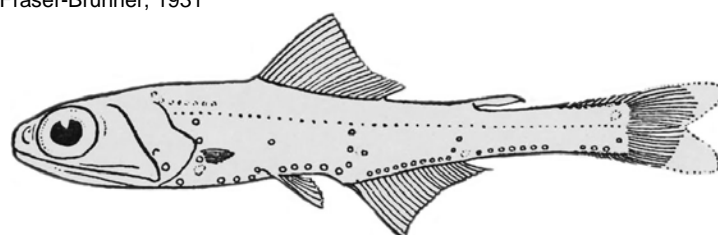
status Evidence-based confirmation of previous records from FCZ-FK.

G. fraseri (Fraser-Brunner, 1931)

Fraser's lanternfish

Lampanyctus fraseri Fraser-Brunner, 1931

Lampanyctus fraseri Fraser-Brunner, 1931
Drawing from original description.



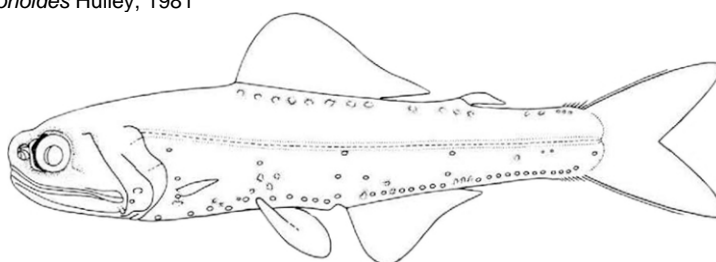
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...circumglobally distributed in the Southern Ocean ... common species in the subantarctic region of the western South Atlantic ... maximum abundance just north of the Antarctic Convergence ... taken at stations farther to the north, as far as the Subtropical Convergence o Fricke et al. (2024): cosmopolitan
<u>EEZ-AR</u>	references	o none
	specimens	NHMD collection: <ul style="list-style-type: none"> o 1575168 348/71 Nielsen USNM collection: <ul style="list-style-type: none"> o 206607 348/71 Hulley ZMH collection: <ul style="list-style-type: none"> o 108508 348/71 Hulley
	status	First record for EEZ-AR. ★
<u>FCZ-FK</u>	references	o ?none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 107835 219/71 Hulley o 107887 227/71 Krefft o 107912 228/71 Krefft o 115545 637/78 Krefft
	status	Tentatively the first evidence-based record from FCZ-FK.

G. hintonoides Hulley, 1981

False-midas lanternfish

Gymnoscopelus hintonoides Hulley, 1981

Gymnoscopelus hintonoides Hulley, 1981
Drawing from original description.



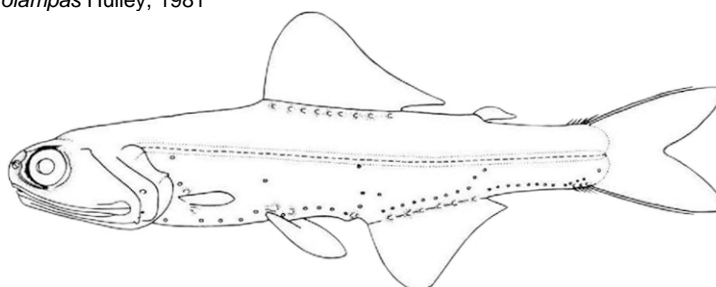
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...taken during the <i>Walther Herwig</i> transects in the western South Atlantic between the Subtropical Convergence and the Antarctic Convergence. It has a typical subantarctic distribution pattern. o Fricke et al. (2024): southern circumglobal
<u>EEZ-AR</u>	references	localities in EEZ-AR: <ul style="list-style-type: none"> o Stehmann & Schulze (1996): <i>Walther Herwig</i> 340/71
	specimens	ZMH collection: <ul style="list-style-type: none"> o 108053 340/71 Hulley o 108523 348/71 Hulley
	status	Evidence-based confirmation of previous records from EEZ-AR.

G. microlampas Hulley, 1981

Minispotted lanternfish

Gymnoscopelus microlampas Hulley, 1981

Gymnoscopelus microlampas Hulley, 1981
Drawing from original description.



	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ... subantarctic distribution pattern... Catch data suggest that the distribution appears to be biased towards the northern region of
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the subantarctic range.
 o Fricke et al. (2024): southern circumglobal

EEZ-AR references o none

specimens ZMH collection:
 o 108294 348/71 Hulley

status First record for EEZ-AR. ★

FCZ-FK references o ?none

specimens ZMH collection:
 o 107838 195/71 Hulley
 o 108096 241/71 Hulley

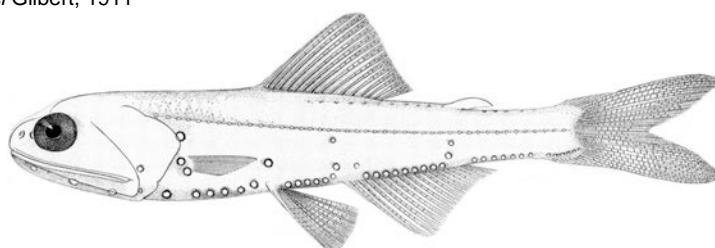
status Tentatively the first evidence-based record from FCZ-FK.

G. nicholsi (Gilbert, 1911)

Nichols' lanternfish

Gymnoscopelus aphy Günther, 1873 [nomen oblitum]
Lampanyctus nicholsi Gilbert, 1911

Lampanyctus nicholsi Gilbert, 1911
 Drawing from original description.



references general statements on the distribution of this species:
 o Hulley (1981): ... one of the commonest myctophid species in the Southern Ocean ... circumpolar distribution between the Antarctic Convergence and the Antarctic Continent ... taken in pelagic hauls by the *Walther Herwig* between 35°47' S and 62°00'S in the western South Atlantic
 o Fricke et al. (2024): circumglobal in southern hemisphere

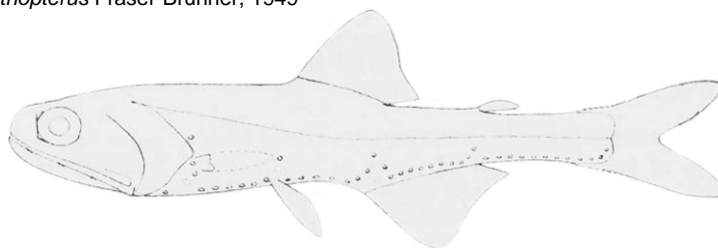
EEZ-AR references non-type specimens from EEZ-AR:
 o Cousseau et al. (2012): INIDEP 621, 53°30'S 61°38'W
 localities in EEZ-AR:
 o McGinnis (1974, 1982): sub *G. aphy*, *Eltanin* 1503 | *William Scoresby* 216
 o Figueroa et al. (1998): 53°30'S 61°38'W
 mere listings for Argentina:
 o Pozzi & Bordalé (1935): sub *Lampanyctus n.*
 o Ringuélet & Arámburu (1960): sub *Lampanyctus n.*
 o Linkowski (1985)
 o Cousseau & Rosso (2019)
 o Cousseau et al. (2020): ref. to Angelescu & Cousseau (1969), Gon & Heemstra [> Hulley 1990], and Figueroa et al. (1998)
 o Mabrugaña & Cousseau (2021): sub *G. aphy* ref. to Menni et al. (1984), and sub *G. nicholsi* ref. to Cousseau et al. (2020)
 type localities from international waters:
 o Gilbert (1911): holotype and paratypes of *Lampanyctus nicholsi* from 47°S 60°W
 non-type specimens from international waters:
 o Cousseau et al. (2012): INIDEP 412, 40°29'S 54°26'W
 miscellanea:
 o Angelescu & Cousseau (1969): stomach content of *Merluccius hubbsi*, no distinct locality, no mentioned voucher specimens
 o Menni et al. (1984): *G. aphy* only mentioned as type species of the genus, not related to a distribution off Argentina; inappropriate reference by Mabrugaña & Cousseau (2021)
 o Hulley (1990): Generally, between Antarctica and 35°S (off Argentina), 47°S (Falkland Current region) ...
 o Mabrugaña et al. (2011): DNA barcoding from off Argentina and Uruguay, no exact localities or voucher specimens

specimens NHMD collection:
 o 1575169-77 348/71 Nielsen
 USNM collection:
 o 206605 348/71 Hulley
 ZMH collection:

		<ul style="list-style-type: none"> ○ 104400 261/66 Krefft ○ 104408 274/66 Krefft ○ 104412 273/66 Krefft ○ 104415 253/66 Krefft ○ 104423 271/66 Krefft ○ 104585 276/66 Krefft ○ 104604 277/66 Krefft ○ 104793 391/66 Krefft ○ 104921 387/66 Krefft ○ 107938 125/71 Krefft ○ 107939 125/71 Krefft ○ 107956 146/71 Krefft ○ 107975 145/71 Krefft ○ 107998 331/71 Krefft ○ 108033 343/71 Krefft ○ 108249 348/71 Krefft ○ 115196 thAR/77 Krefft ○ 115481 517/78 Krefft ○ 115483 504/78 Krefft ○ 115580 675/78 Krefft ○ 115771 828/78 Krefft ○ 115801 905/78 Krefft ○ 115808 877/78 Krefft ○ 115823 902/78 Krefft ○ 120183 318/81 Krefft
	status	Previous records from EEZ-AR are confirmed.
<u>EEZ-UY</u>	references	<p>mere listings for Uruguay:</p> <ul style="list-style-type: none"> ○ Nion et al. (2002, 2016)
	specimens	<p>ZMH collection:</p> <ul style="list-style-type: none"> ○ 104799 417/66 Krefft ○ 115613 707/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.
<u>FCZ-FK</u>	references	<p>localities from FCZ-FK:</p> <ul style="list-style-type: none"> ○ Norman (1930): <i>Discovery</i> 60, 62 ○ McGinnis (1974, 1982): sub <i>G. aphyra</i>, <i>Discovery</i> 60, 62 ○ Figueroa et al. (1998): 53°37'S 60°34'W <p>mere listings for Malvinas/Falkland Islands:</p> <ul style="list-style-type: none"> ○ Coggan et al. (1996)
	specimens	<p>ZMH collection:</p> <ul style="list-style-type: none"> ○ 104507 335/66 Krefft ○ 104571 317/66 Krefft ○ 107939 229/71 Krefft ○ 107654 229/71 Hulley ○ 107969 228/71 Krefft ○ 108006 294/71 Krefft ○ 108045 295/71 Krefft ○ 115466 552/78 Krefft ○ 115486 579/78 Krefft ○ 115576 636/78 Krefft ○ 115577 638/78 Krefft ○ 115739 817/78 Krefft ○ 115746 868/78 Krefft ○ 115748 769/78 Krefft ○ 115759 822/78 Krefft ○ 115767 821/78 Krefft ○ 115805 872/78 Krefft ○ 115834 873/78 Krefft ○ 115838 871/78 Krefft
	status	Evidence-based confirmation of previous records from FCZ-FK.

G. opisthopterus Fraser-Brunner, 1949 (Short-tail lanternfish)
Gymnoscopelus opisthopterus Fraser-Brunner, 1949

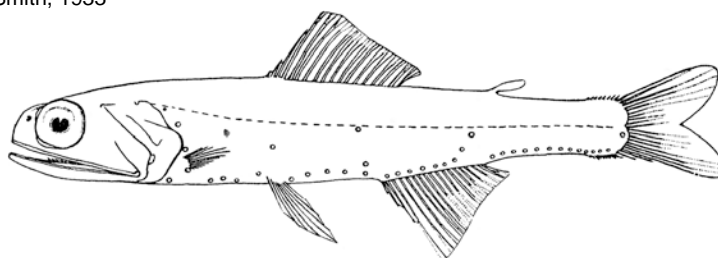
Gymnoscopelus opisthopterus Fraser-Brunner, 1949
 Drawing from original description.



- references** general statements on the distribution of this species:
- o Hulley (1981): ... circumglobally distributed between the Antarctic Convergence and the Antarctic Continent ... recorded from 40°20'S to south of the Antarctic Convergence in the western South Atlantic
 - o Fricke et al. (2024): cosmopolitan in southern hemisphere
- EEZ-AR** **references** localities in EEZ-AR:
- o McGinnis (1974, 1982): *Eltanin* 125
- specimens** ZMH collection:
- o 108083 340/71 Krefft
- status** Evidence-based confirmation of previous records from EEZ-AR.

G. piabilis (Whitley, 1931) Southern blacktip lanternfish
Lampanyctus piabilis Whitley, 1931
Myctophum florentii Smith, 1933

Lampanyctus piabilis Whitley, 1931
 Drawing from original description.



- references** general statements on the distribution of this species:
- o Hulley (1981): ...found between the Subtropical Convergence and the Antarctic Convergence in the Atlantic... A subantarctic or west wind drift distribution pattern is confirmed by *Walther Herwig* data. In pelagic hauls in the western South Atlantic, *Gymnoscopelus piabilis* was recorded between 35°16'S and 51°14'S, and in bottom trawls (345-1250 m) was taken between 34°01'S and 52°02'S in this region.
 - o Fricke et al. (2024): southern circumglobal
- EEZ-AR** **references** localities in EEZ-AR:
- o Stehmann & Schulze (1996): *Walther Herwig* 693/78
- mere listings for Argentina:
- o Menni et al. (1984): ref. to Angelescu & Cousseau (1969)
 - o Chebez & Padilla (1999)
 - o Cousseau & Rosso (2019)
 - o Cousseau et al. (2020): ref. to Gon & Heemstra [> Hulley 1990]
 - o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020)
- non-type specimens from international waters:
- o Cousseau et al. (2012): INIDEP 396, 44°57'S 53°01'W | INIDEP 407, 40°29'S 49°33'W
- miscellanea:
- o Angelescu & Cousseau (1969): stomach content of *Merluccius hubbsi*, no distinct locality, no mentioned voucher specimens
 - o Hulley (1990): Generally, between the STC and the APF (Atlantic Sector to south of Australia/New Zealand), but with northern extensions in eastern boundary currents... In the Southern Ocean, recorded at about 51°S 40°W...
 - o Mabragaña et al. (2011): DNA barcoding from off Argentina and Uruguay, no exact localities or voucher specimens
- specimens** NHMD collection:
- o 1575158-59 348/71 Nielsen
 - o 1575160-67 348/71 Nielsen
- USNM collection:
- o 206606 348/71 Hulley

		<ul style="list-style-type: none"> o 441302 348/71 Hulley
	ZMH collection:	<ul style="list-style-type: none"> o 104695 274/66 Krefft o 104717 273/66 Krefft o 107958 123/71 Krefft o 108090 329/71 Krefft o 108094 341/71 Krefft o 108738 348/71 Krefft o 115207 thAR/77 Krefft o 115406 503/78 Krefft o 115556 693/78 Krefft o 115662 718/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	ZMH collection: <ul style="list-style-type: none"> o 103446 197/66 Hulley o 104715 232/66 Krefft o 106132 30/68 Krefft o 115661 707/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.
<u>FCZ-FK</u>	references	<ul style="list-style-type: none"> o ?none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 107960 228/71 Krefft o 107961 195/71 Hulley o 107963 219/71 Krefft o 107966 227/71 Krefft
	status	Tentatively the first evidence-based record from FCZ-FK.

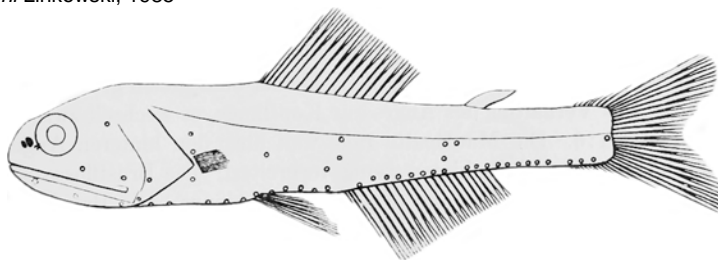
Lampichthys Fraser-Brunner, 1949

L. procerus (Brauer, 1904)

Blackhead lanternfish

- Myctophum procerum* Brauer, 1904
- Lampichthys rectangularis* Fraser-Brunner, 1949
- Lampichthys rutkovichi* Linkowski, 1985

Myctophum procerum Brauer, 1904
Drawing from original description.



	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...circumglobally distributed in the region of the Subtropical Convergence ... <i>Walther Herwig</i> data indicate that in the South Atlantic, <i>Lampichthys procerus</i> is distributed between 35°S and 44°S... o Fricke et al. (2024): circumglobal
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998) localities in international waters: <ul style="list-style-type: none"> o Figueroa et al. (1998): 41°12'S 52°56'W
	specimens	NHMD collection: <ul style="list-style-type: none"> o 1575191-99 348/71 Nielsen, sub <i>L. rectangularis</i> o 1575200 348/71 Nielsen, sub <i>L. rectangularis</i> USNM collection: <ul style="list-style-type: none"> o 206609 348/71 Hulley, sub <i>L. rectangularis</i>
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)

localities in international waters:
 o Figueroa et al. (1998): 37°29'S 51°02'W

specimens ZMH collection:
 o 103876 197/66 Krefft & Hulley

status Evidence-based confirmation of previous records from EEZ-UY.

Notoscopelus Günther, 1864

N. caudispinosus (Johnson, 1863) Spinetail lanternfish
Scopelus caudispinosus Johnson, 1863

references general statements on the distribution of this species:
 o Hulley (1981): ...extends southwards to about 37°S in the western South Atlantic ... the species was irregularly taken to as far south as 38°39'S in the western South Atlantic... A broadly tropical distribution pattern for the species is therefore indicated in this ocean.
 o Fricke et al. (2024): circumglobal in tropical seas, but not in eastern Pacific

EEZ-AR references mere listings for Argentina:
 o Mabrugaña & Cousseau (2021): ref. to Figueroa (2019)
 miscellanea:
 o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens | for this species references only at family level

specimens o none

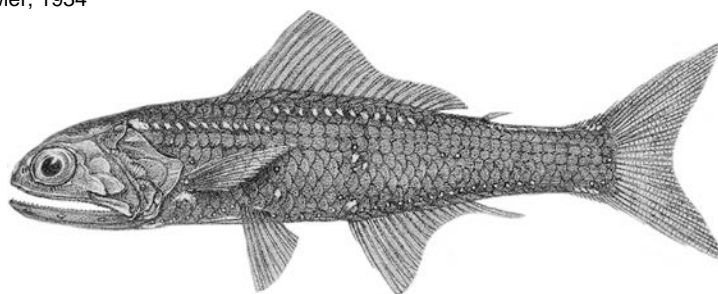
status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

EEZ-UY references mere listings for Uruguay:
 o Nion et al. (2002, 2016)

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

N. resplendens (Richardson, 1845) Patchwork lanternfish
Lampanyctus resplendens Richardson, 1845
Notoscopellus brachychier Eigenmann & Eigenmann, 1889
Notoscopelus ejectus Waite, 1904
Serpa hoffmanni Fowler, 1934



Lampanyctus resplendens Richardson, 1845
 Drawing from original description.
 Swapped horizontally.

references general statements on the distribution of this species:
 o Hulley (1981): In the Atlantic, *Notoscopelus resplendens* has a broadly tropical distribution ... throughout the Atlantic, with a southern limit in the region of the Subtropical Convergence...
 o Fricke et al. (2024): circumglobal in tropical through temperate seas, disjunct

EEZ-AR references mere listings for Argentina:
 o Cousseau & Rosso (2019)
 o Mabrugaña & Cousseau (2021): ref. to Gon & Heemstra [> Hulley 1990]
 miscellanea:
 o Hulley (1990): Generally, 47°N to the STC (Atlantic)... In the Southern Ocean, recorded from 60°58'S 48°05'W...

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

		at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

subfamily **Lampanyctinae**

Bolinichthys Paxton, 1972

B. indicus (Nafpaktitis & Nafpaktitis, 1969) Smoothcheek lanternfish

Lepidophanes indicus Nafpaktitis & Nafpaktitis, 1969

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ... bipolar subtropical distribution in the Atlantic... In the western South Atlantic, it was taken between 34°01'S and the region of the Subtropical Convergence. This would confirm a bisubtropical distribution for the species. o Fricke et al. (2024): Atlantic, Indian Ocean
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Mabragaña & Cousseau (2021): ref. to Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

B. photothorax (Parr, 1928) Spurcheek lanternfish

?*Lampanyctus stilbius* Gilbert, 1908
Lampanyctus photothorax Parr, 1928

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...regularly taken in the Atlantic Ocean, where it is said to have a tropical-semisubtropical distribution pattern. o Fricke et al. (2024): circumglobal in all tropical and subtropical seas
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Mabragaña & Cousseau (2021): ref. to Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

B. supralateralis (Parr, 1928) Stubby lanternfish
Lampanyctus supralateralis Parr, 1928

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ... questionably tropical-subtropical distribution in the Atlantic. ... In the western South Atlantic, west of 40°W, it has been recorded between 34°12'S and 40°18'S... The absence of the species between 40°W and 0° in the South Atlantic is no doubt due to the influence of subantarctic water in this region. o Fricke et al. (2024): circumglobal in tropical seas, but not in eastern Pacific
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Mabrugaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

Ceratoscopelus Günther, 1864

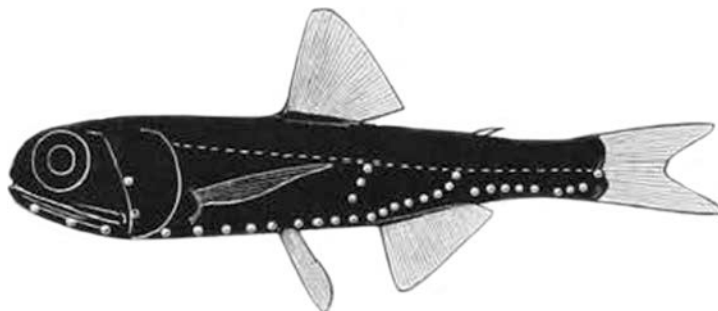
C. maderensis (Lowe, 1839) Horned lanternfish
Scopelus maderensis Lowe, 1839
Scopelus acanthurus Facciola, 1882
Scopelus doderleini Facciola, 1882

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...distributed in the Mediterranean and in the eastern North Atlantic between 20°N and 50°N ... temperate-subtropical or temperate-semisubtropical species. o Fricke et al. (2024): Mediterranean Sea, Atlantic
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Mabrugaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

C. warmingii (Lütken, 1892)

Warming's lanternfish

Scopelus warmingii Lütken, 1892
Lampanyctus polyphotis Beebe, 1932



Scopelus warmingii Lütken, 1892
 Drawing from original description.

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...in the Atlantic possesses a broadly tropical or tropical-subtropical distribution pattern ... southern limit lies in the region of the Subtropical Convergence... o Fricke et al. (2024): circumglobal in tropical and warm temperate seas, except not in southeastern Pacific
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Stehmann (1979): illustrated field guide [1978 not seen] o Menni et al. (1984): ref. to Stehmann (1978) o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998) localities in international waters: <ul style="list-style-type: none"> o Figueroa et al. (1998): 40°31'S 45°50'W
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	ZMH collection: <ul style="list-style-type: none"> o 103472 197/66 Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.

Lampadena Goode & Bean, 1893

L. chavesi Collett, 1905

Chaves' lanternfish

Lampadena chavesi Collett, 1905

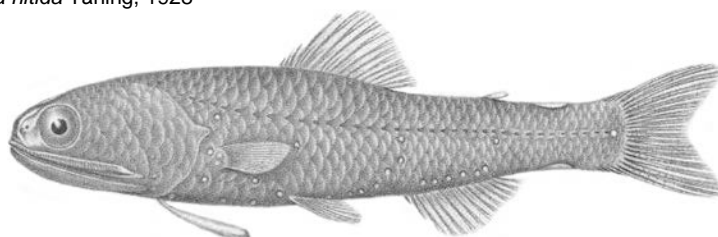
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the Atlantic, the species has a biantitropical or bipolar questionably subtropical distribution. ... A bisubtropical pattern is confirmed. o Fricke et al. (2024): Atlantic, southern Indian Ocean, southeastern Pacific
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Angelescu et al. (1958) o Ringuet & Arámburu (1960) o Menni et al. (1984): ref. to Angelescu et al. (1958) o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Menni et al. (1984)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

L. luminosa (Garman, 1899)

Luminous lanternfish

Myctophum luminosum Garman, 1899
Lampadena luminosa nitida Tåning, 1928

Myctophum luminosum Garman, 1899
 Drawing from original description.



	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...distributed between about 20°N and 20°S in all three oceans ... in the Brazil Current to 35°56'S ... its southern boundary in the western Atlantic is not as precise, due to the transport effect of the Brazil Current. o Fricke et al. (2024): circumglobal in tropical through temperate seas
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	ZMH collection: <ul style="list-style-type: none"> o 103335 197/66 Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.

L. notialis Nafpaktitis & Pastón, 1968

Notal lanternfish

Lampadena notialis Nafpaktitis & Pastón, 1968

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...circumglobally in the southern hemisphere between 40°S and 47°S ... confined to the region of the Subtropical Convergence ... its limit in the western sector [of the South Atlantic] lies at 32°11'S, the position marking the northern boundary of the Subtropical Convergence. o Fricke et al. (2024): southern circumglobal, but not in eastern Pacific
<u>EEZ-AR</u>	references	localities in EEZ-AR: <ul style="list-style-type: none"> o Stehmann & Schulze (1996): <i>Walther Herwig</i> 694/78 mere listings for Argentina: <ul style="list-style-type: none"> o Menni et al. (1984): ref. to Angelescu & Cousseau (1969) o Nakamura et al. (1986): specimens from 'Argentina' hosted at FSFL, however without information on exact localities, distribution on map o Chebez & Padilla (1999) o Cousseau & Rosso (2019) o Cousseau et al. (2020): ref. to Nakamura (1986) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020) miscellanea: <ul style="list-style-type: none"> o Angelescu & Cousseau (1969): stomach content of <i>Merluccius hubbsi</i>, no distinct locality, no mentioned voucher specimens
	specimens	ZMH collection: <ul style="list-style-type: none"> o 104629 273/66 Krefft o 104728 268/66 Krefft o 107886 122/71 Krefft o 115355 517/78 Krefft o 115365 504/78 Krefft

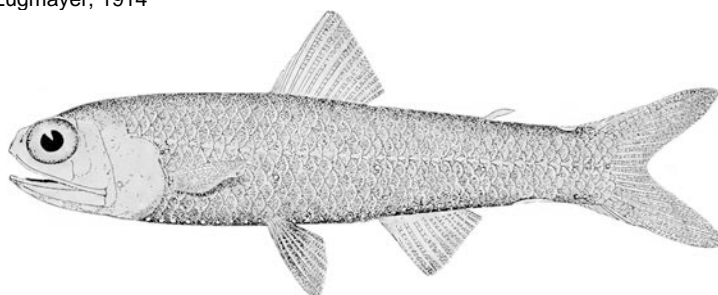
		o 115374	503/78	Krefft
		o 115565	694/78	Krefft
		o 115652	716/78	Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.		
<u>EEZ-UY</u>	references	mere listings for Uruguay:		
		o Nion et al. (2002, 2016)		
	specimens	ZMH collection:		
		o 103286	197/66	Krefft
		o 106229	30/68	Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.		

L. speculigera Goode & Bean, 1896

Mirror lanternfish

Lampadena speculigera Goode & Bean, 1896
Lampadena braueri Zugmayer, 1914

Lampadena speculigera Goode & Bean, 1896
 Drawing from original description.



	references	general statements on the distribution of this species:		
		o Hulley (1981): ...generally distributed between about 35°S and 48°S in the South Atlantic, i.e. in the region of the Subtropical Convergence.		
		o Fricke et al. (2024): southern circumglobal, Atlantic		
<u>EEZ-AR</u>	references	non-type specimens from EEZ-AR:		
		o Cousseau et al. (2020): INIDEP 532, 40°16'S 56°08'W		
		mere listings for Argentina:		
		o Mabrugaña & Cousseau (2021): ref. to Cousseau et al. (2020)		
	specimens	NHMD collection:		
		o 1575183-86	348/71	Nielsen
		USNM collection:		
		o 206610	348/71	Hulley
		ZMH collection:		
		o 108426	348/71	Krefft
		o 115204	trialAR/77	Krefft
		o 115455	503/78	Krefft
	status	Previous records from EEZ-AR are confirmed.		

Lampanyctus Bonaparte, 1840

L. achirus Andriashev, 1962

Cripplefin lanternfish

Lampanyctus achirus Andriashev, 1962

	references	general statements on the distribution of this species:		
		o Hulley (1981): In the western South Atlantic, its northern limit approximates the position of the Subtropical Convergence and the species extends southwards, throughout the area, apparently as far as the Weddell-Scotia Confluence.		
		o Fricke et al. (2024): southern circumglobal		
<u>EEZ-AR</u>	references	localities in EEZ-AR:		
		o McGinnis (1974, 1982): <i>Eltanin</i> 125		
	specimens	ZMH collection:		
		o 104590	271/66	Hulley
		o 104600	269/66	Hulley
		o 108034	339/71	Hulley
		o 108039	329/71	Hulley
		o 108041	240/71	Hulley
		o 108767	348/71	Krefft
		o 115390	503/78	Krefft
		o 115391	517/78	Krefft

		<ul style="list-style-type: none"> o 115395 590/78 Krefft o 115579 692/78 Krefft o 115663 719/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	o none
	specimens	ZMH collection: o 106822 30/68 Krefft
	status	First record for EEZ-UY. ★
<u>FCZ-FK</u>	references	non-type specimens from FCZ-FK: o Balushkin & Prirodina (2020): ZIN 45137, <i>Zund</i> 120
	specimens	ZMH collection: o 107919 228/71 Stehmann o 107923 227/71 Hulley o 107955 219/71 Krefft o 115578 637/78 Krefft o 115733 817/78 Krefft
	status	Previous records from FCZ-FK are confirmed.

L. ater Tåning, 1928

Dusky lanternfish

Lampanyctus ater Tåning, 1928

Lampanyctus ater Tåning, 1928
Drawing from Fraser-Brunner (1949).



	references	<p>general statements on the distribution of this species:</p> <ul style="list-style-type: none"> o Hulley (1981): ...bipolar questionably subtropical distribution in the Atlantic ... bisubtropical distribution ... taken between 27°S and the Subtropical Convergence in the western South Atlantic. o Fricke et al. (2024): circumglobal, but not in eastern Pacific
<u>EEZ-AR</u>	references	<p>mere listings for Argentina:</p> <ul style="list-style-type: none"> o Cousseau & Rosso (2019): sub <i>Nannobranchium atrum</i> o Mabrugaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019) <p>miscellanea:</p> <ul style="list-style-type: none"> o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): species not mentioned, erroneous ref. by Mabrugaña & Cousseau (2021)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	<p>mere listings for Uruguay:</p> <ul style="list-style-type: none"> o Nion et al. (2002) o Nion et al. (2016): sub <i>Nannobranchium atrum</i>
	specimens	ZMH collection: o 106820 30/68 Hulley
	status	Evidence-based confirmation of previous records from EEZ-UY.

L. australis (Tåning, 1932)

Southern lanternfish

Lampanyctus alatus australis Tåning, 1932

	references	<p>general statements on the distribution of this species:</p> <ul style="list-style-type: none"> o Hulley (1981): ...circumglobally distributed in the region of the Subtropical Convergence ... In the western South Atlantic, the northern limit is at about 33°S, in association with the northern swing of the Convergence in this region... o Fricke et al. (2024): southern circumglobal
<u>EEZ-AR</u>	references	mere listings for Argentina:

- o Menni et al. (1984): ref. to Angelescu & Cousseau (1969)
 - o Chebez & Padilla (1999)
 - o Cousseau & Rosso (2019)
 - o Cousseau et al. (2020): ref. to Angelescu & Cousseau (1969)
 - o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020)
- miscellanea:
- o Angelescu & Cousseau (1969): stomach content of *Merluccius hubbsi*, no distinct locality, no mentioned voucher specimens

specimens	NHMD collection:		
	o 1575187-90	348/71	Nielsen
	USNM collection:		
	o 206608	348/71	Hulley
	ZMH collection:		
	o 104670	273/66	Krefft
	o 104671	274/66	Krefft
	o 108049	341/71	Hulley
	o 115181	trialAR/77	Krefft
	o 115400	518/78	Krefft

status Evidence-based confirmation of previous records from EEZ-AR.

EEZ-UY references mere listings for Uruguay:
o Nion et al. (2002, 2016)

specimens	ZMH collection:		
	o 103914	197/66	Hulley
	o 104668	230/66	Krefft
	o 115644	707/78	Krefft
	o 115761	700/78	Krefft

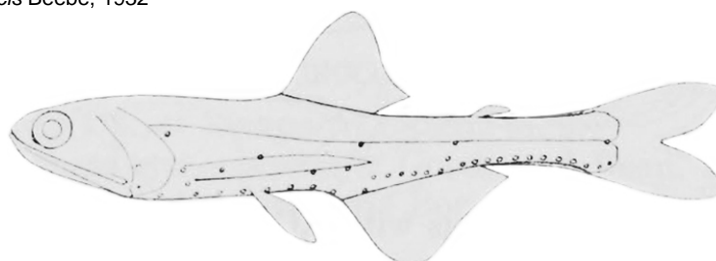
status Evidence-based confirmation of previous records from EEZ-UY.

L. festivus Tåning, 1932

Festive lanternfish

Lampanyctus festivus Tåning, 1928
Lampanyctus septilucis Beebe, 1932

Lampanyctus festivus Tåning, 1932
Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): ... in the Atlantic at least, it has a bipolar subtropical distribution. ... The South Atlantic population extends between 27°57'S and the Subtropical Convergence in the western sector... a bisubtropical distribution pattern for the species is apparent from *Walther Herwig* data.
 - o Fricke et al. (2024): probably circumglobal, except not eastern Pacific

EEZ-UY references o none

specimens	ZMH collection:		
	o 103745	197/66	Hulley
	o 106766	30/68	Krefft

status First record for EEZ-UY.

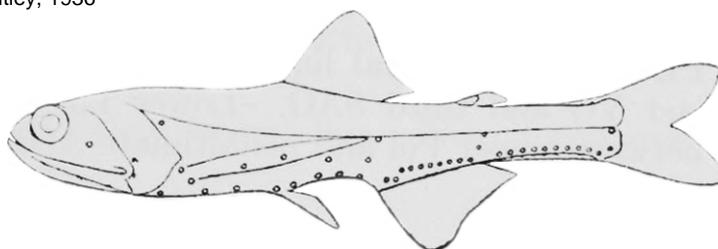


L. intricarius Tåning, 1932

Diamondcheek lanternfish

Lampanyctus intricarius Tåning, 1928
Serpa conspicua Whitley, 1936

Lampanyctus intricarius Tåning, 1932
 Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): ...bipolar temperate or bipolar subpolar-temperate distribution in the Atlantic ... In the South Atlantic, it occurs in the region of the Subtropical Convergence... *Walther Herwig* data would therefore confirm a bitemperate distribution pattern for the species.
 - o Fricke et al. (2024): circumglobal, but not in eastern Pacific

EEZ-AR

- references o none
- specimens ZMH collection:
- o 104634 271/66 Krefft
 - o 107937 144/71 Krefft
 - o 115206 thAR/77 Krefft

status First record for EEZ-AR. ★

EEZ-UY

- references o none
- specimens ZMH collection:
- o 106682 30/68 Hulley

status First record for EEZ-UY. ★

L. lepidolichnus Becker, 1967

Mermaid lanternfish

Lampanyctus lepidolichnus Becker, 1967

- references general statements on the distribution of this species:
- o Hulley (1981): ...occurs at or near the Subtropical Convergence in the southern hemisphere, but is not circumglobally distributed ... *Walther Herwig* data confirm a convergence pattern for the species in the South Atlantic...
 - o Fricke et al. (2024): circumglobal in Southern Hemisphere, not in eastern or central Pacific

EEZ-AR

- references mere listings for Argentina:
- o Wisner (1976)
- specimens ZMH collection:
- o 108722 348/71 Hulley
 - o 115373 503/78 Krefft

status Evidence-based confirmation of previous records from EEZ-AR.

EEZ-UY

- references o none
- specimens ZMH collection:
- o 103657 197/66 Hulley

status First record for EEZ-UY. ★

L. lineatus Tåning, 1928

(Lined lanternfish)

Lampanyctus lineatus Tåning, 1928

- references general statements on the distribution of this species:
- o Hulley (1981): According to *Walther Herwig* data, a form of broadly tropical distribution is evident. ... The southern limit of the species in the western sector [of the Atlantic] lies at about 10°S...
 - o Fricke et al. (2024): circumglobal in tropical through temperate seas, but perhaps not in the eastern Pacific

EEZ-AR

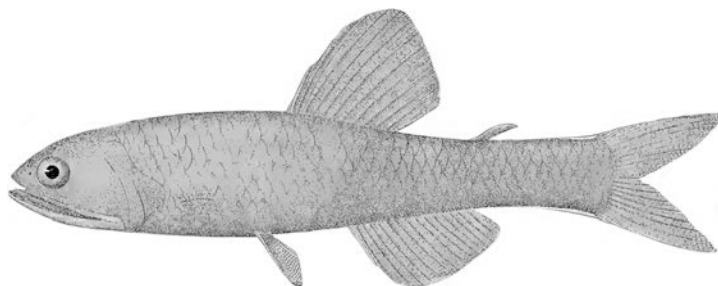
- references mere listings for Argentina:
- o Cousseau & Rosso (2019)

		<ul style="list-style-type: none"> o Mabrugaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019)
		miscellanea:
		<ul style="list-style-type: none"> o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): species not mentioned, erroneous ref. by Mabrugaña & Cousseau (2021)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002) o Nion et al. (2016): sub <i>Nannobanchium lineatum</i>
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

L. macdonaldi (Goode & Bean, 1896)

MacDonald's lanternfish

Nannobanchium macdonaldi Goode & Bean, 1896
Lampanyctus iselini Parr, 1934



Nannobanchium macdonaldi Goode & Bean, 1896.
 Drawing from original description.

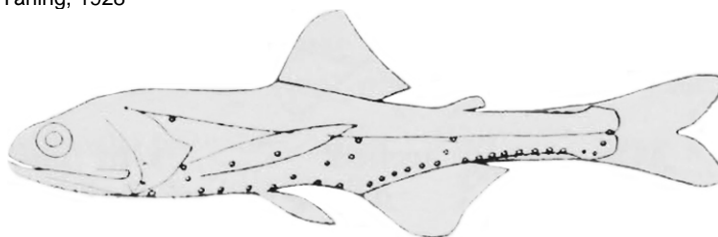
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the southern hemisphere, <i>Lampanyctus macdonaldi</i> is considered to be a subantarctic species, distributed between the Subtropical Convergence and the Antarctic Convergence. ... <i>Walther Herwig</i> data confirm a bitemperate distribution pattern in the Atlantic. ... In the South Atlantic, the species was taken between the Subtropical Convergence and the Antarctic Convergence... o Fricke et al. (2024): Atlantic and adjacent Arctic areas, and circumglobal in Southern Hemisphere 									
<u>EEZ-AR</u>	references	o none									
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr> <td>o 108084</td> <td>240/71</td> <td>Hulley</td> </tr> <tr> <td>o 108086</td> <td>239/71</td> <td>Hulley</td> </tr> <tr> <td>o 108711</td> <td>348/71</td> <td>Hulley</td> </tr> </table>	o 108084	240/71	Hulley	o 108086	239/71	Hulley	o 108711	348/71	Hulley
o 108084	240/71	Hulley									
o 108086	239/71	Hulley									
o 108711	348/71	Hulley									
	status	First record for EEZ-AR. ★									
<u>FCZ-FK</u>	references	o ?none									
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr> <td>o 107839</td> <td>219/71</td> <td>Hulley</td> </tr> <tr> <td>o 107853</td> <td>228/71</td> <td>Hulley</td> </tr> <tr> <td>o 107856</td> <td>227/71</td> <td>Hulley</td> </tr> </table>	o 107839	219/71	Hulley	o 107853	228/71	Hulley	o 107856	227/71	Hulley
o 107839	219/71	Hulley									
o 107853	228/71	Hulley									
o 107856	227/71	Hulley									
	status	Tentatively the first evidence-based record from FCZ-FK.									

L. nobilis Tåning, 1932

Noble lampfish

Lampanyctus nobilis Tåning, 1928

Lampanyctus nobilis Tåning, 1928
Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): In the Atlantic, *Lampanyctus nobilis* exhibits a tropical distribution pattern ... extends...to about 20°S in the western sector of the South Atlantic.
 - o Fricke et al. (2024): circumglobal in tropical and warm temperate seas, but not in southeastern Pacific

EEZ-UY references o none

specimens ZMH collection:

- o 103863 197/66 Hulley

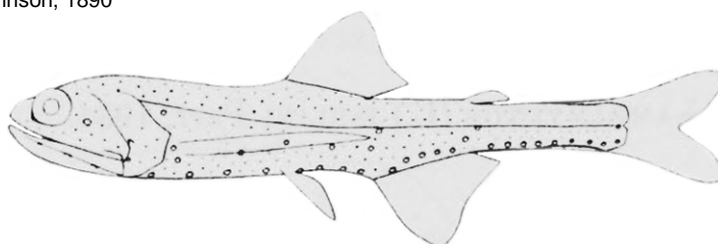
status First record for EEZ-UY. ★

L. pusillus (Johnson, 1890)

Pygmy lanternfish

Scopelus pusillus Johnson, 1890

Lampanyctus pusillus (Johnson, 1890)
Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): ... bipolar temperate-subtropical distribution in the Atlantic. ...in the western sector [of the South Atlantic] between 32°S and 40°S...
 - o Fricke et al. (2024): Atlantic (including Mediterranean Sea) and southern circumglobal in temperate seas

EEZ-UY references o none

specimens ZMH collection:

- o 103885 197/66 Hulley

status First record for EEZ-UY. ★

L. wisneri (Zahuranec, 2000)

(Wisner's lanternfish)

Nannobranchium wisneri Zahuranec, 2000

- references general statements on the distribution of this species:
- o Zahuranec (2000): ...nearly circumglobal in Subtropical Convergence waters...
 - o Fricke et al. (2024): South Atlantic

EEZ-AR references o none

specimens ZMH collection:

- o 108663 348/71 Zahuranec
- o 109150 348/71 Zahuranec

status First record for EEZ-AR. ★

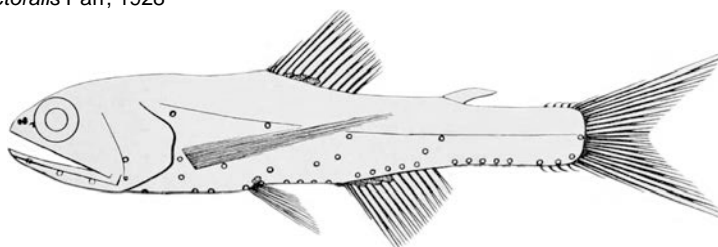
Lepidophanes Fraser-Brunner, 1949

L. gaussi (Brauer, 1906)

(Gauss' lanternfish)

Myctophum gaussi Brauer, 1906
 ?*Lampanyctus gaussi* var. *mediterranea* Borodin, 1928
Lampanyctus subpectoralis Parr, 1928

Myctophum gaussi Brauer, 1906
 Drawing from original description.



references general statements on the distribution of this species:
 o Hulley (1981): ...bipolar subtropical distribution ... absent over equatorial regions and was again taken in waters of low productivity between about 10°S and 30°S off the Brazilian coast.
 o Fricke et al. (2024): Atlantic

EEZ-UY **references** o none

specimens ZMH collection:
 o 103798 197/66 Hulley

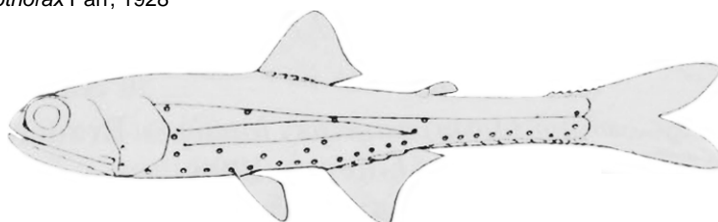
status First record for EEZ-UY. ★

L. guentheri (Goode & Bean, 1896)

Günther's lanternfish

Lampanyctus guentheri Goode & Bean, 1896
Lampanyctus melanothorax Parr, 1928

Lepidophanes guentheri (Goode & Bean, 1896)
 Drawing from Fraser-Brunner (1949).



references general statements on the distribution of this species:
 o Hulley (1981): ...a tropical species. ...as far as the Subtropical Convergence in the western South Atlantic ... a form of tropical distribution intermediate between tropical and broadly tropical ... its southern distributional limit at the Subtropical Convergence in the western South Atlantic can be related to the 15°C isotherm at 50 m. ... Specimens taken south of the Subtropical Convergence...are apparently associated with water which crosses the Convergence and mixes with Subantarctic Surface Water...
 o Fricke et al. (2024): Atlantic between 45°N and 50°S

EEZ-AR **references** mere listings for Argentina:
 o Cousseau & Rosso (2019)
 o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998)
 localities in international waters:
 o Figueroa et al. (1998): 40°29'S 49°33'W

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

EEZ-UY **references** mere listings for Uruguay:
 o Nion et al. (2002, 2016)

specimens ZMH collection:
 o 103855 197/66 Krefft & Hulley

status Evidence-based confirmation of previous records from EEZ-UY.

Taaningichthys Bolin, 1959

T. bathyphilus (Tåning, 1928) Deepwater lanternfish
Lampadena bathyphila Tåning, 1928

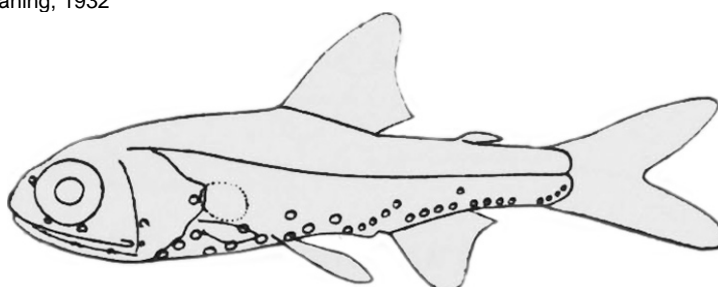
- references general statements on the distribution of this species:
 - o Hulley (1981): ...circumglobally distributed in a broad belt between about 43°N and 67°31'S... The species was taken between 42°50'N and 43°36'S during the *Walther Herwig* transects...
 - o Fricke et al. (2024): circumglobal in tropical through temperate seas
- EEZ-AR references mere listings for Argentina:
 - o Cousseau & Rosso (2019)
 - o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998)
 localities in international waters:
 - o Figueroa et al. (1998): 40°29'S 49°33'W
- specimens
 - o none
- status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
- EEZ-UY references mere listings for Uruguay:
 - o Nion et al. (2002, 2016)
- specimens
 - o none
- status While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

subfamily Diaphinae

Diaphus Eigenmann & Eigenmann, 1890

D. anderseni Tåning, 1932 Andersen's lanternfish
Diaphus anderseni Tåning, 1932

Diaphus anderseni Tåning, 1932
 Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
 - o Hulley (1981): ...is known between 0° and the Subtropical Convergence in the western South Atlantic. ...in the western South Atlantic...it extends southwards to about 35°S. ...approximates a southern subtropical pattern...
 - o Fricke et al. (2024): circumglobal in tropical and subtropical seas
- EEZ-UY references
 - o none
- specimens ZMH collection:
 - o 103358 197/66 Hulley
- status First record for EEZ-UY. ★

D. bertelseni Nafpaktitis, 1966 Bertelsen's lanternfish
Diaphus bertelseni Nafpaktitis, 1966

- references general statements on the distribution of this species:
 - o Hulley (1981): ... a questionably tropical-subtropical distribution in the Atlantic. ...in the Brazil Current from about 28°S to 36°37'S. ...appears to have a broadly tropical distribution pattern...
 - o Fricke et al. (2024): Atlantic, western and central Pacific
- EEZ-AR references mere listings for Argentina:
 - o Mabragaña & Cousseau (2021): ref. to Figueroa (2019)
 miscellanea:
 - o Figueroa (2019): drawing based key of fishes from the SW Atlantic

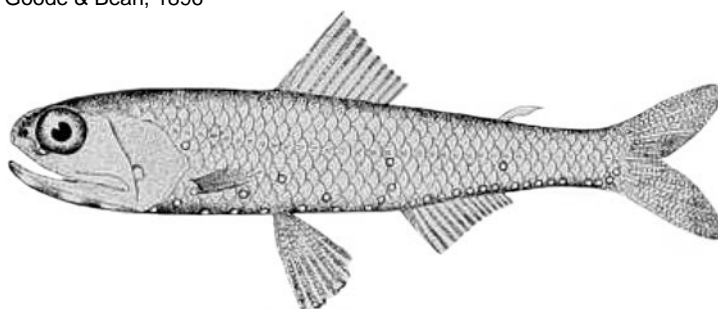
Ocean without localities or specimens | for this species references only at family level

	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

D. dumerilii (Bleeker, 1856)

Dumeril's lanternfish

Scopelus dumerilii Bleeker, 1856
Myctophum nocturnum Poey, 1861
Scopelus schmitzi Johnson, 1890
Lampanyctus lacerta Goode & Bean, 1896



Lampanyctus lacerta Goode & Bean, 1896
 Drawing from original description.

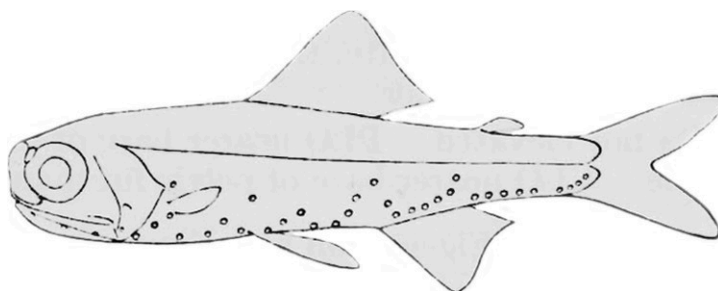
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the Atlantic Ocean...a tropical distribution, but may be transported in western boundary currents to about 51°N and 39°S. ... A tropical distribution pattern for the species is evident from <i>Walther Herwig</i> data . . .taken between 27°50'S and 45°17'S in the western South Atlantic... o Fricke et al. (2024): Atlantic, Pacific 												
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Menni et al. (1984): ref. to Angelescu & Cousseau (1969) o Chebez & Padilla (1999) o Cousseau & Rosso (2019) o Cousseau et al. (2020): ref. to Angelescu & Cousseau (1969) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020) miscellanea: <ul style="list-style-type: none"> o Angelescu & Cousseau (1969): stomach content of <i>Merluccius hubbsi</i>, no distinct locality, no mentioned voucher specimens 												
	specimens	o none												
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.												
<u>EEZ-UY</u>	references	localities in EEZ-UY: <ul style="list-style-type: none"> o Brauer (1908): sub <i>Myctophum lacerta</i>, 37°S 53°W mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016) 												
	specimens	ZMH collection: <table border="0" style="margin-left: 20px;"> <tr> <td>o 103609</td> <td>197/66</td> <td>Kreff</td> </tr> <tr> <td>o 104649</td> <td>208/66</td> <td>Kreff</td> </tr> <tr> <td>o 104703</td> <td>230/66</td> <td>Kreff</td> </tr> <tr> <td>o 104890</td> <td>429/66</td> <td>Kreff</td> </tr> </table>	o 103609	197/66	Kreff	o 104649	208/66	Kreff	o 104703	230/66	Kreff	o 104890	429/66	Kreff
o 103609	197/66	Kreff												
o 104649	208/66	Kreff												
o 104703	230/66	Kreff												
o 104890	429/66	Kreff												
	status	Evidence-based confirmation of previous records from EEZ-UY.												

D. effulgens (Goode & Bean, 1896)

Headlight lanternfish

Aethoprora effulgens Goode & Bean, 1896
Myctophum aeolochrus Barnard, 1927
Diaphus macrophus Parr, 1928
Diaphus antelucens Kulikova, 1961

Diaphus effulgens (Goode & Bean, 1896)
Drawing from Fraser-Brunner (1949).



- references general statements on the distribution of this species:
- o Hulley (1981): ...a biantitropical or bipolar subtropical distribution is evident. ...in the South Atlantic...found to be absent between 24°16'S and 33°00'S.
 - o Fricke et al. (2024): southern circumglobal and North Atlantic

EEZ-UY references o none

specimens ZMH collection:
o 106776 30/68 Krefft

status First record for EEZ-UY.

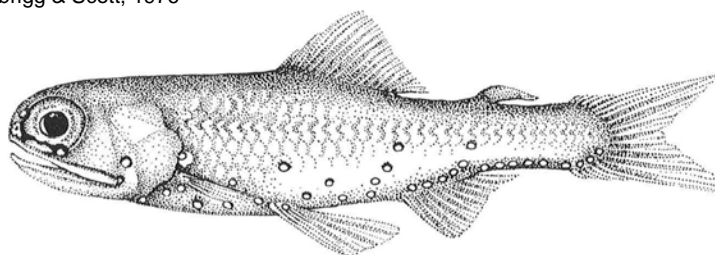


D. hudsoni Zurbrigg & Scott, 1976

Hudson's lanternfish

Diaphus hudsoni Zurbrigg & Scott, 1976

Diaphus hudsoni Zurbrigg & Scott, 1976
Drawing from original description.



- references general statements on the distribution of this species:
- o Hulley (1981): ...probably has a circumglobal distribution. ... In the western South Atlantic, it has been taken between 34°01'S and 47°50'S...
 - o Fricke et al. (2024): southern circumglobal

EEZ-AR references mere listings for Argentina:
o Cousseau & Rosso (2019)
o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998)
localities in international waters:
o Figueroa et al. (1998): 44°57'S 53°01'W

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

EEZ-UY references mere listings for Uruguay:
o Nion et al. (2002, 2016)

specimens ZMH collection:
o 106673 30/68 Hulley

status Evidence-based confirmation of previous records from EEZ-UY.

D. meadi Nafpaktitis, 1978

Mead's lanternfish

Diaphus meadi Nafpaktitis, 1978

- references general statements on the distribution of this species:
- o Hulley (1981): ...circumglobally distributed in the region of the Subtropical Convergence... In the western South Atlantic...distributed between 32°05'S and 40°46'S.
 - o Fricke et al. (2024): circumglobal in Southern Hemisphere

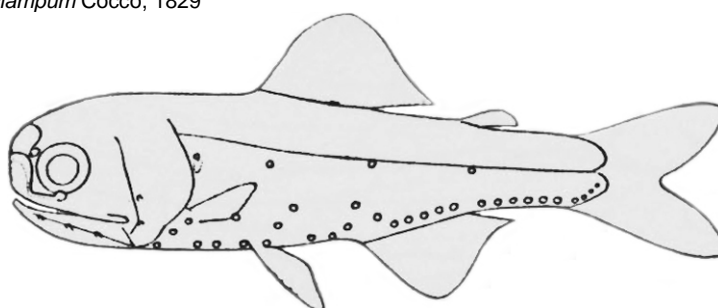
EEZ-AR references mere listings for Argentina:
o Cousseau & Rosso (2019)
o Mabragaña & Cousseau (2021): ref. to Figueroa (2019)

		miscellanea:
		o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	type localities from EEZ-UY: o Nafpaktitis (1978): paratypes, ZMUC 2334936-43, <i>Atlantis II</i> 1441 o Koerber (2023): on overlooked records from EEZ-UY, ref. to Nafpaktitis (1978)
	specimens	ZMH collection: o 103385 197/66 Hulley o 106805 30/68 Hulley
	status	Evidence-based confirmation of previous records from EEZ-UY.

D. metopoclampus (Cocco, 1829)

Bluntnose lanternfish

Myctophum metopoclampus Cocco, 1829



Diaphus metopoclampus (Cocco, 1829)
Drawing from Fraser-Brunner (1949).

	references	general statements on the distribution of this species: o Hulley (1981): In the Atlantic, it has a biantitropical or bipolar questionably temperate-semisubtropical pattern. ...western South Atlantic, north of the Subtropical Convergence. ... In the South Atlantic, it is generally taken between about 27°S and 40°S... o Fricke et al. (2024): circumglobal (including Mediterranean Sea)
<u>EEZ-AR</u>	references	mere listings for Argentina: o Cousseau & Rosso (2019) o Mabrugaña & Cousseau (2021): sub <i>D. metopoclampus</i> , ref. to Cousseau et al. (2010) and Figueroa (2019) miscellanea: o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: o Nion et al. (2002, 2016)
	specimens	ZMH collection: o 103650 197/66 Krefft
	status	Evidence-based confirmation of previous records from EEZ-UY.

D. mollis Tåning, 1932

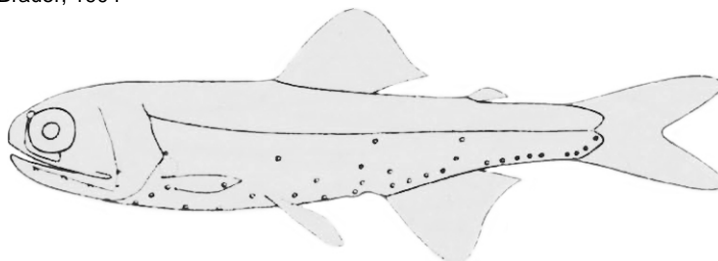
Soft lanternfish

Diaphus mollis Tåning, 1932

	references	general statements on the distribution of this species: o Hulley (1981): ...broadly tropical or tropical-subtropical distribution pattern in the Atlantic ... taken between about 35°N and the region of the Subtropical Convergence at about 40°S... o Fricke et al. (2024): circumglobal in tropical through temperate seas, but
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		not in eastern Pacific	
<u>EEZ-UY</u>	references	o none	
	specimens	ZMH collection:	
		o 103627	197/66 Krefft
		o 106724	30/68 Hulley
	status	First record for EEZ-UY.	★

D. perspicillatus (Ogilby, 1898) Flatface lanternfish
Aethoprora perspicillata Ogilby, 1898
Myctophum elucens Brauer, 1904



Diaphus perspicillatus (Ogilby, 1898)
 Drawing from Fraser-Brunner (1949).

references	general statements on the distribution of this species:
	o Hulley (1981): A tropical distribution is confirmed by <i>Walther Herwig</i> data. ... extends southwards...to 35°56' S in the western South Atlantic...
	o Fricke et al. (2024): circumglobal in tropical through temperate seas, but not in the eastern Pacific

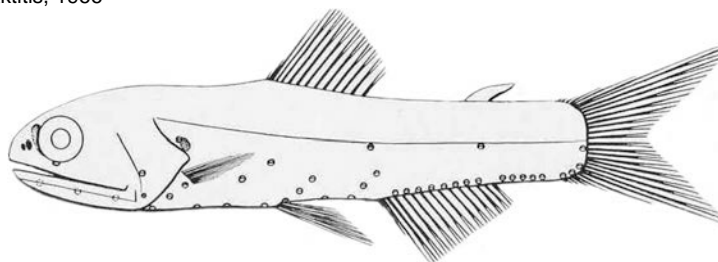
<u>EEZ-UY</u>	references	o none	
	specimens	ZMH collection:	
		o 103618	197/66 Hulley
	status	First record for EEZ-UY.	★

D. subtilis Nafpaktitis, 1978 (Subtle lanternfish)
Diaphus subtilis Nafpaktitis, 1978

references	general statements on the distribution of this species:
	o Hulley (1981): ...uncommon tropical-semisubtropical Atlantic species... <i>Walther Herwig</i> specimens were taken between 23°50'N 20°08'W and 36°37'S 51°32'W.
	o Fricke et al. (2024): Atlantic

<u>EEZ-UY</u>	references	o none	
	specimens	ZMH collection:	
		o 107177	30/68 Hulley
	status	First record for EEZ-UY.	★

D. vanhoeffeni (Brauer, 1906) (Vanhoefen's lanternfish)
Myctophum vanhoeffeni Brauer, 1906
Diaphus lewisi Nafpaktitis, 1966



Myctophum vanhoeffeni Brauer, 1906
 Drawing from original description.

references	general statements on the distribution of this species:
	o Hulley (1981): ...restricted to regions...within the Mauritanian Upwelling and Guinean Regions of the Atlantic, with...a southern limit at about 15°S off the African coast... Two male specimens (31,40-32,55 mm)

		were taken from a stomach of a hake caught off the La Plata River mouth (WH 424/66)...
		o Fricke et al. (2024): Atlantic
<u>EEZ-UY</u>	references	o none
	specimens	ZMH collection: o 104978 424/66 Krefft
	status	First record for EEZ-UY. ★

Lobianchia Gatti, 1904

L. dofleini (Zugmayer, 1911) Doflein's lanternfish
Myctophum dofleini Zugmayer, 1911

	references	general statements on the distribution of this species: o Hulley (1981): On the basis of <i>Walther Herwig</i> material , the distribution...may be divided into two subregions in the Atlantic: a northern population...and a southern population, which is found between 29°58'S and the Subtropical Convergence in the western South Atlantic... o Fricke et al. (2024): Atlantic (including Mediterranean Sea) and mostly southern circumglobal
<u>EEZ-AR</u>	references	mere listings for Argentina: o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019) miscellanea: o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

subfamily Myctophinae

Centrobranchus Fowler, 1904

C. nigroocellatus (Günther, 1873) Roundnose lanternfish
Scopelus nigroocellatus Günther, 1873
Myctophum coccoi forma regularis Brauer, 1904
Centrobranchus brevirostris Becker, 1964

	references	general statements on the distribution of this species: o Hulley (1981): In the Atlantic, it has a questionably tropical-subtropical distribution between about 40°N and 36°S. o Fricke et al. (2024): circumglobal, but not in eastern Pacific
<u>EEZ-AR</u>	references	mere listings for Argentina: o Mabragaña & Cousseau (2021): ref. to Figueroa (2019) miscellanea: o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	mere listings for Uruguay: o Nion et al. (2002, 2016)

specimens o none
 status While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

Dasyscopelus Günther, 1864

D. obtusirostris (Tåning, 1928) Bluntnout lanternfish
Myctophum pristilepis obtusirostre Tåning, 1928

references general statements on the distribution of this species:
 o Hulley (1981): [sub *Myctophum obtusirostre*] ...occurs in the tropical regions of all three oceans ... in the western South Atlantic, isolated specimens have been caught as far south as 39°S.
 o Fricke et al. (2024): circumglobal in tropical and subtropical seas, but not eastern Pacific

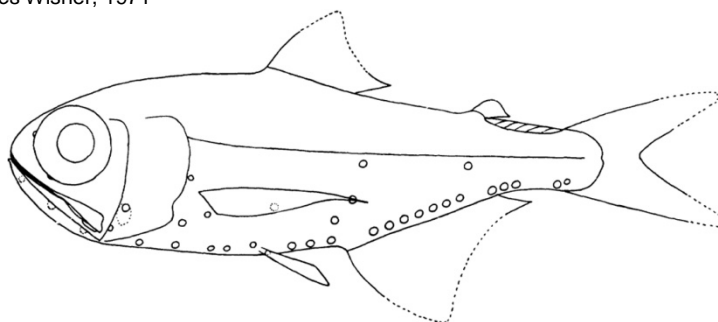
EEZ-AR references mere listings for Argentina:
 o Mabragaña & Cousseau (2021): ref. to Figueroa (2019)
 miscellanea:
 o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens | for this species (sub *Myctophum obtusirostre*) references only at family level

specimens o none
 status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

EEZ-UY references mere listings for Uruguay:
 o Nion et al. (2002, 2016): sub *Myctophum obtusirostre*

specimens o none
 status While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

D. selenops (Tåning, 1932) Lunar lanternfish
Myctophum selenops Tåning, 1928
Myctophum selenoides Wisner, 1971



Myctophum selenoides Wisner, 1971
 Drawing from original description.

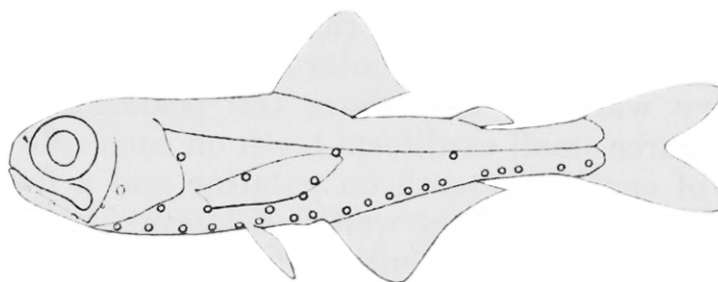
references general statements on the distribution of this species:
 o Hulley (1981): [sub *Myctophum s.*] ...in the Atlantic between about 34°N and 37°S. ... a broadly tropical species, exhibiting a disjunct distribution over its geographical range. ...extends southwards to about 38°S in the western South Atlantic...
 o Fricke et al. (2024): circumglobal in tropical through temperate seas, but not eastern Pacific

EEZ-UY references o none
 specimens ZMH collection:
 o 104125 197/66 Krefft

status First record for EEZ-UY. ★

Diogenichthys Bolin, 1939

D. atlanticus (Tåning, 1928) Longfin lanternfish
Myctophum laternatum atlanticum Tåning, 1928
Diogenichthys scofieldi Bolin, 1939



Diogenichthys atlanticus (Tåning, 1928)
Drawing from Fraser-Brunner (1949).

- references general statements on the distribution of this species:
- o Hulley (1981): ...circumglobally distributed in the southern hemisphere... In the Atlantic, the species is known to occur between about 50°N and 40°S ...widespread distribution pattern...
 - o Fricke et al. (2024): circumglobal in tropical through temperate seas

EEZ-UY references o none

- specimens ZMH collection:
- o 103878 197/66 Krefft

status First record for EEZ-UY.



Electrona Goode & Bean, 1896

E. antarctica (Günther, 1878)

Antarctic lanternfish

Scopelus antarcticus Günther, 1878
Scopelus colletti Lütken, 1892

- references general statements on the distribution of this species:
- o Hulley (1981): ...the commonest circumpolar myctophid found in the upper 100 m between the Antarctic Convergence and the Antarctic Continent. ...in the western South Atlantic...recorded as far north as 44°47'S 51°57'W.
 - o Fricke et al. (2024): circumglobal

EEZ-AR references localities in EEZ-AR:

- o McGinnis (1974, 1982): *Eltanin* 125, 1503

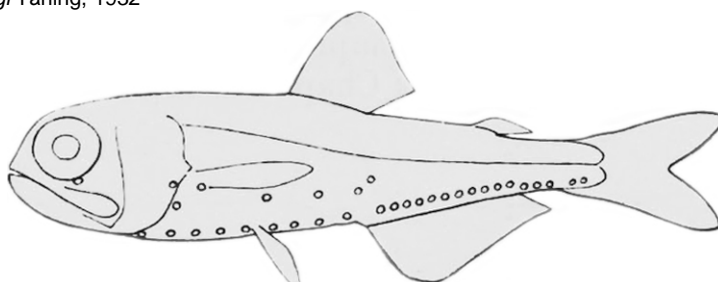
specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

E. carlsbergi (Tåning, 1932)

Carlsberg's lanternfish

Myctophum carlsbergi Tåning, 1932



Electrona carlsbergi (Tåning, 1932)
Drawing from Fraser-Brunner (1949).

- references general statements on the distribution of this species:
- o Hulley (1981): ...circumglobally distributed between the Subtropical Convergence and the Antarctic Convergence ... taken by the *Walther Herwig* between about 40°S and 60°S and between 10°W and 55°W in the South Atlantic.
 - o Fricke et al. (2024): southern circumglobal

EEZ-AR references non-type specimens from EEZ-AR:

- o Cousseau et al. (2012): INIDEP 607, 53°27'S 62°46'W

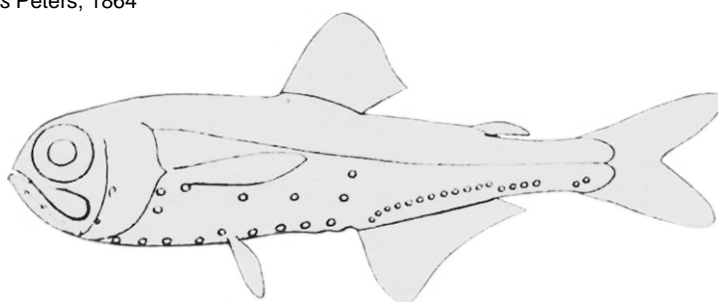
- mere listings for Argentina:
- o Cousseau et al. (2020): ref. to Cousseau et al. (2012)
 - o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2012) and Cousseau et al. (2020)

specimens	AMS collection:		
	o I.16456-001	348/71	Nielsen
	NHMD collection:		
	o 1575154-57	348/71	Nielsen
	USNM collection:		
	o 206604	348/71	Hulley
	ZMH collection:		
	o 108117	318/81	Krefft
	o 108246	348/71	Krefft
	o 120187	318/81	Krefft
status	Previous records from EEZ-AR are confirmed.		

E. subaspera (Günther, 1864)

Rough lanternfish

?*Scopelus stellatus* Bennett, 1840
Scopelus subasper Günther, 1864
Myctophum megalops Peters, 1864



Electrona subaspera (Günther, 1864)
 Drawing from Fraser-Brunner (1949).

references	general statements on the distribution of this species:
	o Hulley (1981): ... circumglobally distributed between the Subtropical Convergence and the Antarctic Convergence in all three oceans... <i>Walther Herwig</i> data indicate a distribution between 35°56'S and 55°12'S in the western South Atlantic and confirm the concept of a subantarctic distribution pattern...
	o Fricke et al. (2024): southern circumglobal

<u>EEZ-AR</u>	references	localities in EEZ-AR:
		o Stehmann & Schulze (1996): <i>Walther Herwig</i> 694/78
		mere listings for Argentina:
		o Cousseau & Rosso (2019)
		o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998)
		localities in international waters:
		o Figueroa et al. (1998): 40°30'S 54°25'W

specimens	ZMH collection:		
	o 115352	503/78	Krefft
	o 115367	517/78	Krefft
	o 115368	518/78	Krefft
	o 115474	504/78	Krefft
	o 115530	694/78	Krefft

status Evidence-based confirmation of previous records from EEZ-AR.

<u>EEZ-UY</u>	references	mere listings for Uruguay:
		o Nion et al. (2002, 2016)

specimens	ZMH collection:		
	o 103725	197/66	Krefft
	o 115650	700/78	Krefft

status Evidence-based confirmation of previous records from EEZ-UY.

<u>FCZ-FK</u>	references	o ?none
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specimens	ZMH collection:		
	o 107901	227/71	Hulley
	o 107907	228/71	Hulley
	o 108047	294/71	Hulley
	o 115354	575/78	Krefft

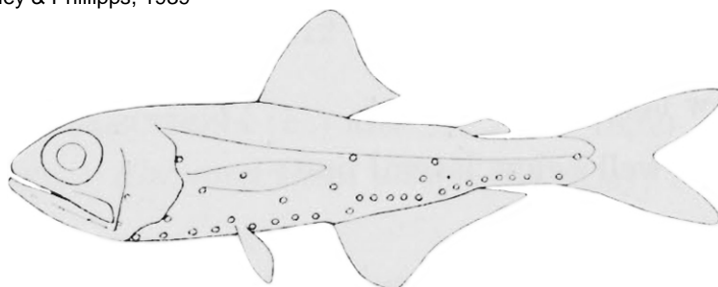
status Tentatively the first evidence-based record from FCZ-FK.

Hygophum Bolin, 1939

H. hanseni (Tåning, 1932)

Hansen's lanternfish

Myctophum hanseni Tåning, 1932
Serpa peccatus Whitley & Phillipps, 1939



Hygophum hanseni (Tåning, 1932)
 Drawing from Fraser-Brunner (1949).

- references** general statements on the distribution of this species:
- o Hulley (1981): ...in the region of the Subtropical Convergence in all three oceans, and its distribution has been variously ascribed to a narrow belt between 34°S and 45°S...or to a southern limit in the region of the Antarctic Convergence.
 - o Fricke et al. (2024): southern circumglobal

- EEZ-AR** **references** mere listings for Argentina:
- o Cousseau & Rosso (2019)
 - o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2010) and Figueroa (2019)
- miscellanea:
- o Cousseau et al. (2010): list of species from the SW Atlantic Ocean without localities or specimens
 - o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens | for this species references only at family level

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

- EEZ-UY** **references** mere listings for Uruguay:
- o Nion et al. (2002, 2016)

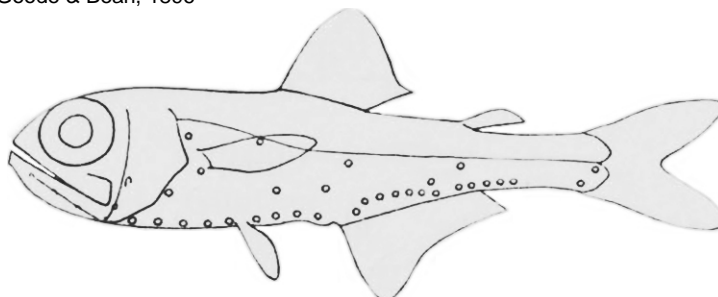
- specimens** ZMH collection:
- | | | |
|----------|--------|-----------------|
| o 103452 | 197/66 | Krefft & Hulley |
| o 106126 | 30/68 | Krefft |

status Evidence-based confirmation of previous records from EEZ-UY.

H. hygomii (Lütken, 1892)

Hygom's lanternfish

Scopelus hygomii Lütken, 1892
Myctophum remiger Goode & Bean, 1896



Hygophum hygomii (Lütken, 1892)
 Drawing from Fraser-Brunner (1949).

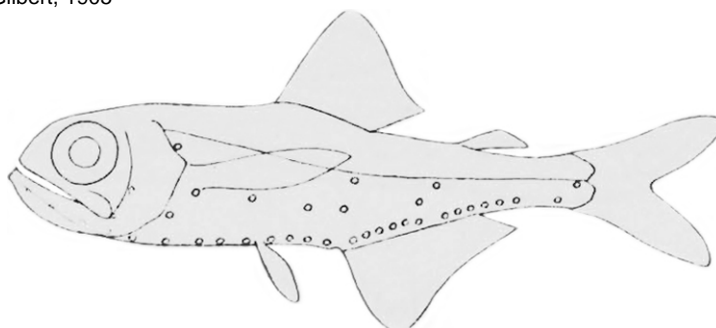
- references** general statements on the distribution of this species:
- o Hulley (1981): ... known from the Mediterranean and Atlantic Ocean, where it has been recorded between 20°N-46°N and 25°S-35°S, i.e. a bipolar antitropical or bipolar temperate-semisubtropical distribution pattern ... *Walther Herwig* data confirm the antitropical distribution pattern for the species in the Atlantic ... between 25°54'S and about 40°S in the western South Atlantic...
 - o Fricke et al. (2024): southern circumglobal, but not central Pacific, Atlantic including Mediterranean Sea

<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Mabragaña & Cousseau (2021): ref. to Figueroa (2019) miscellanea: <ul style="list-style-type: none"> o Figueroa (2019): drawing based key of fishes from the SW Atlantic Ocean without localities or specimens for this species references only at family level
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.
<u>EEZ-UY</u>	references	o none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 103482 197/66 Krefft
	status	First record for EEZ-UY. ★

H. reinhardtii (Lütken, 1892)

Reinhardt's lanternfish

Scopelus reinhardtii Lütken, 1892
Myctophum braueri Gilbert, 1905



Hygophum reinhardtii (Lütken, 1892)
 Drawing from Fraser-Brunner (1949).

references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the Atlantic at least, it is said to have an antitropical distribution... It reoccurs between 17°36'S and the Subtropical Convergence in the western sector...of the South Atlantic. o Fricke et al. (2024): circumglobal in tropical and temperate seas, but usually absent in equatorial waters of Indo-West-Pacific
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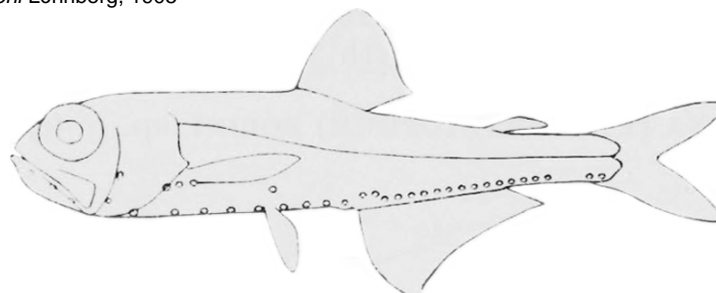
<u>EEZ-UY</u>	references	o none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 103402 197/66 Hulley
	status	First record for EEZ-UY. ★

Kreftichthys Hulley, 1981

K. anderssoni (Lönnberg, 1905)

Rhombic lanternfish

Myctophum anderssoni Lönnberg, 1905



Kreftichthys anderssoni (Lönnberg, 1905)
 Drawing from Fraser-Brunner (1949).

references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ... essentially distributed in a 20° latitude belt centred on the Antarctic Convergence. Its southern limit lies at the Antarctic Divergence/Weddell Confluence and its northern limit appears to vary between 32°S and 40°S ... a broadly antarctic species ... taken in the western South Atlantic between 34°01'S and 59°51'S... o Fricke et al. (2024): southern circumglobal
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<u>EEZ-AR</u>	references	localities in EEZ-AR: <ul style="list-style-type: none"> o McGinnis (1974, 1982): sub <i>Protomyctophum a.</i>, <i>Eltanin</i> 125, 348, 1503
	specimens	USNM collection: <ul style="list-style-type: none"> o 206597 348/71 Hulley ZMH collection: <ul style="list-style-type: none"> o 115192 trialAR/77 Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>FCZ-FK</u>	references	<ul style="list-style-type: none"> o ?none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 107882 195/71 Hulley
	status	Tentatively the first evidence-based record from FCZ-FK.

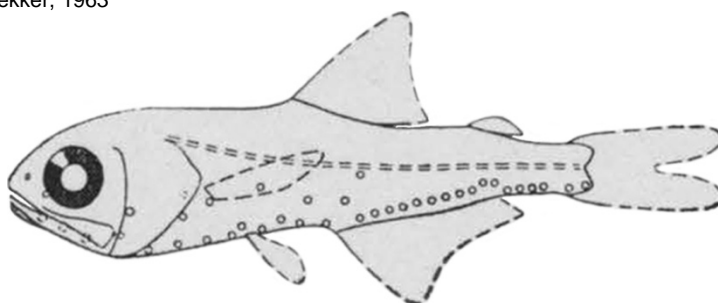
Metelectrona Wisner, 1963

M. ventralis (Bekker, 1963)

Flaccid lanternfish

Electrona ventralis Bekker, 1963

Electrona ventralis Bekker, 1963
Drawing from original description.



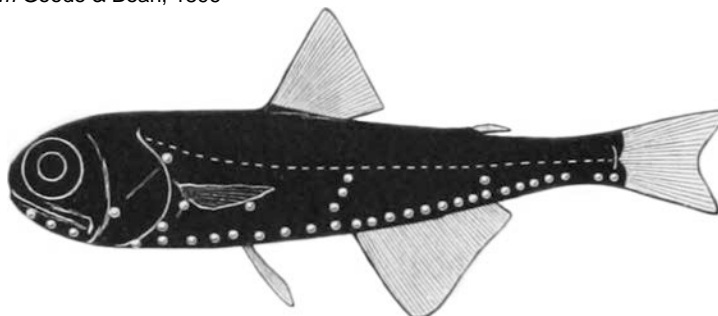
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): ...originally described from the western South Atlantic ... a transitional water species and is found in or near the region of the Subtropical Convergence in the Atlantic ... taken by the <i>Walther Herwig</i> between 35°56'S and 50°40'S in the western South Atlantic. A southern limit well to the north of the Antarctic Convergence is evident... o Fricke et al. (2024): southern circumglobal
<u>EEZ-AR</u>	references	localities in EEZ-AR: <ul style="list-style-type: none"> o Stehmann & Schulze (1996): <i>Walther Herwig</i> 340/71 mere listings for Argentina: <ul style="list-style-type: none"> o Cousseau & Rosso (2019) o Cousseau et al. (2020): ref. to Gon & Heemstra [> Hulley 1990] o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020) non-type specimens from international waters: <ul style="list-style-type: none"> o Cousseau et al. (2012): INIDEP 514, 43°05'S 54°39'W miscellanea: <ul style="list-style-type: none"> o Hulley (1990): "Generally, circumglobal between 36° and 51°S. The most southerly records (50°40'S 50°01'W, 47°50.6'S 40°00.8'W) in the south-west Atlantic lie outside the defined boundary limits."
	specimens	USNM collection: <ul style="list-style-type: none"> o 206602 348/71 Hulley ZMH collection: <ul style="list-style-type: none"> o 109352 348/71 Krefft o 110966 340/71 Hulley o 115510 504/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	<ul style="list-style-type: none"> o none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 104234 197/66 Krefft o 115682 707/78 Krefft
	status	First record for EEZ-UY. ★

Myctophum Rafinesque, 1810

M. affine (Lütken, 1892)

Metallic lanternfish

Scopelus affinis Lütken, 1892
 ?*Myctophum opalinum* Goode & Bean, 1896



Scopelus affinis Lütken, 1892
 Drawing from original description.

- references general statements on the distribution of this species:
- o Hulley (1981): [sub *M. affine*] ...endemic in the Atlantic ... may be present as far south as 36°S in the western South Atlantic [sub *M. ? affine*]
 - o Fricke et al. (2024): Atlantic

- EEZ-AR references mere listings for Argentina:
- o Angelescu et al. (1958)
 - o Menni et al. (1984): ref. to Angelescu et al. (1958)
 - o Cousseau & Rosso (2019)
 - o Mabragaña & Cousseau (2021): ref. to Menni et al. (1984)

specimens o none

status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

- EEZ-UY references mere listings for Uruguay:
- o Nion et al. (2002, 2016)

specimens ZMH collection:

- o 104019 197/66 Hulley

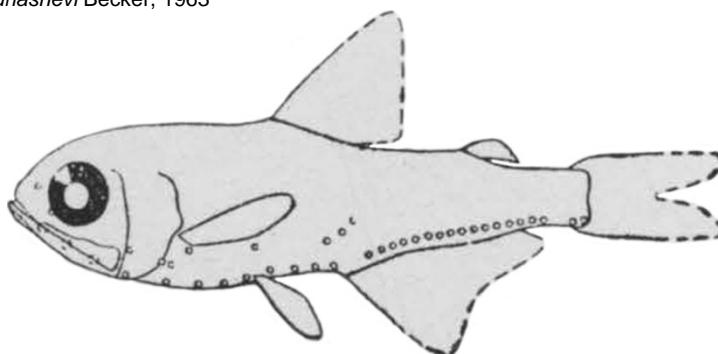
status Evidence-based confirmation of previous records from EEZ-UY.

Protomyctophum Fraser-Brunner, 1949

P. andriashevi Becker, 1963

Andriashev's lanternfish

Protomyctophum andriashevi Becker, 1963



Protomyctophum andriashevi Becker, 1963
 Drawing from original description.

- references general statements on the distribution of this species:
- o Hulley (1981): ...taken between 41°46'S and 51°05'S, east of 50°W, but is latitudinally more broadly distributed west of 50°W. The northern limit at 35°13'S, 52°24'W may be associated with the northern displacement of the Subtropical Convergence in this region, while the southern limit at 56°55'S, 55°00'W corresponds to the position of the observed Antarctic Convergence ... possesses a true subantarctic distribution pattern.
 - o Fricke et al. (2024): southern circumglobal

EEZ-AR references o none

specimens USNM collection:

- o 206596 348/71 Hulley
- ZMH collection:
- o 108136 232/71 Hulley
- o 109161 348/71 Hulley

status First record for EEZ-AR.

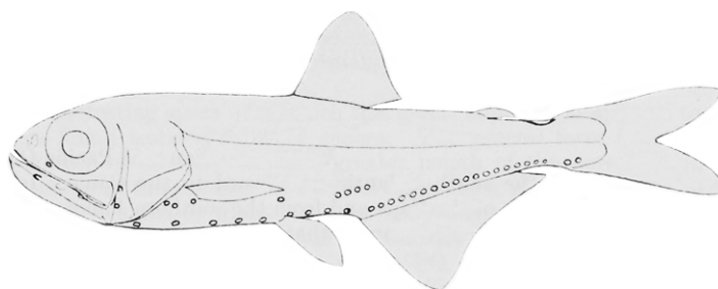


P. bolini (Fraser-Brunner, 1949)

Bolin's lanternfish

Electrona bolini Fraser-Brunner, 1949
Protomyctophum mcginnisi Prokofiev, 2004

Electrona bolini Fraser-Brunner, 1949
 Drawing from original description.



- references general statements on the distribution of this species:
- o Hulley (1981): ...circumglobal distribution in antarctic and subantarctic waters, with a southern limit in the region of the Antarctic Divergence. In the South Atlantic, its northern limit lies in the region 41°S-45°S ... distribution pattern may be considered as broadly antarctic...
 - o Fricke et al. (2024): circumglobal in Southern Hemisphere

EEZ-AR

- references localities in EEZ-AR:
- o McGinnis (1974, 1982): *Eltanin* 125, 126, 1503

- specimens ZMH collection:
- o 120204 318/81 Krefft

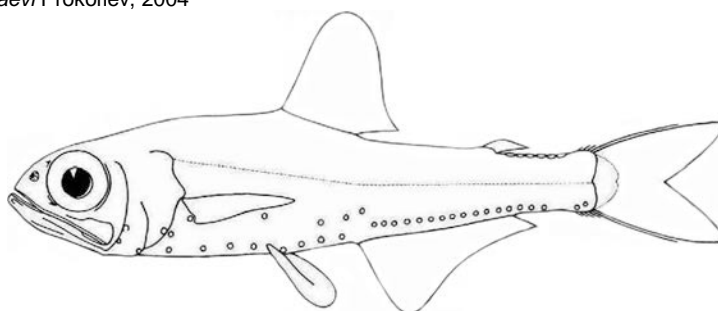
status Evidence-based confirmation of previous records from EEZ-AR.

P. choriodon Hulley, 1981

Gaptooth lanternfish

Protomyctophum choriodon Hulley, 1981
Protomyctophum kolaevi Prokofiev, 2004

Protomyctophum choriodon Hulley, 1981
 Drawing from original description.



- references general statements on the distribution of this species:
- o Hulley (1981): In the western South Atlantic...taken between 36°19'S and 50°40'S, in the region of and south of the Subtropical Convergence.
 - o Fricke et al. (2024): cosmopolitan in Southern Hemisphere

EEZ-AR

- references localities in EEZ-AR:
- o Stehmann & Schulze (1996): *Walther Herwig* 693/78
- mere listings for Argentina:
- o Cousseau & Rosso (2019)
 - o Mabrugaña & Cousseau (2021): ref. to Figueroa et al. (1998)
- localities in international waters:
- o Figueroa et al. (1998): 40°29'S 54°26'W

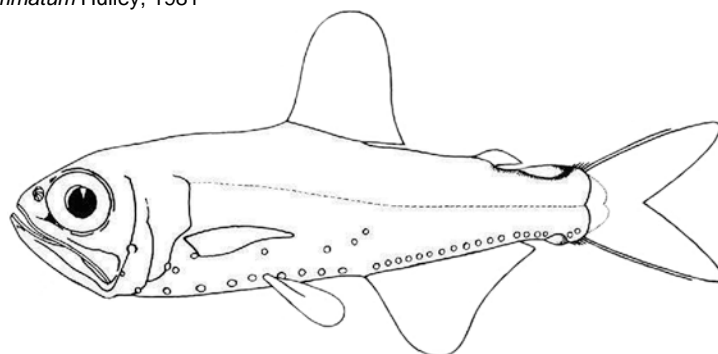
- specimens ZMH collection:
- o 104744 278/66 Hulley
 - o 104745 277/66 Hulley
 - o 115211 trialAR/77 Krefft
 - o 155598 693/78 Krefft
 - o 115599 692/78 Krefft

		<ul style="list-style-type: none"> o 115609 676/78 Krefft o 115850 906/78 Krefft
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	type localities from EEZ-UY: <ul style="list-style-type: none"> o Hulley (1981): holotype [ZMH 25221, ex ISH 1541-1966a] and paratypes [ZMH 25222, ex ISH 1541-1966b-g], <i>Walther Herwig</i> 417/66 o Krefft (1987): type catalog mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	ZMH collection: <ul style="list-style-type: none"> o 25221 HT 417/66 Hulley o 25222 PT 417/66 Hulley o 104983 417/66 Hulley
	status	Evidence-based confirmation of previous records from EEZ-UY.
<u>FCZ-FK</u>	references	<ul style="list-style-type: none"> o ?none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 108139 251/71 Hulley o 108162 295/71 Hulley
	status	Tentatively the first evidence-based record from FCZ-FK.

P. gemmatum Hulley, 1981

Jewelled lanternfish

Protomyctophum gemmatum Hulley, 1981



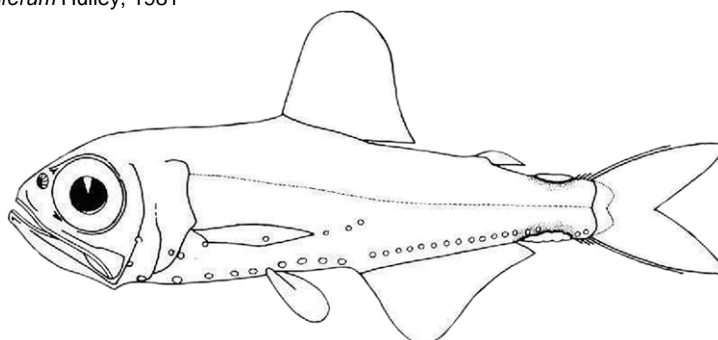
Protomyctophum gemmatum Hulley, 1981
Drawing from original description.

	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the western South Atlantic...taken between 38°20'S and 56°55'S, i.e. between the Subtropical Convergence and the Antarctic Convergence. o Fricke et al. (2024): cosmopolitan
<u>EEZ-AR</u>	references	<ul style="list-style-type: none"> o none
	specimens	USNM collection: <ul style="list-style-type: none"> o 258451 348/71 Hulley
	status	First record for EEZ-AR. ★

P. luciferum Hulley, 1981

Damsel lanternfish

Protomyctophum luciferum Hulley, 1981



Protomyctophum luciferum Hulley, 1981
Drawing from original description.

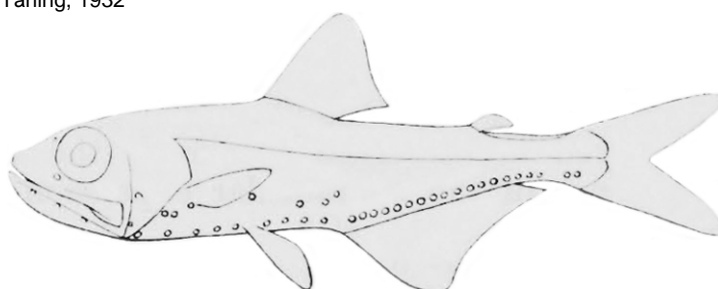
	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the western South Atlantic...taken between 34°01'S and 48°04'S... o Fricke et al. (2024): circumglobal
<u>EEZ-AR</u>	references	o none
	specimens	USNM collection: <ul style="list-style-type: none"> o 108138 339/71 Hulley o 108150 238/71 Stehmann o 109031 348/71 Krefft o 109155 348/71 Hulley o 120205 318/81 Krefft
	status	First record for EEZ-AR. ★
<u>EEZ-UY</u>	references	o none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 104105 197/66 Hulley
	status	First record for EEZ-UY. ★
<u>FCZ-FK</u>	references	o ?none
	specimens	ZMH collection: <ul style="list-style-type: none"> o 115852 874/78 Krefft
	status	Tentatively the first evidence-based record from FCZ-FK.

P. normani (Tåning, 1932)

Norman's lanternfish

Myctophum normani Tåning, 1932

Protomyctophum normani (Tåning, 1932)
Drawing from Fraser-Brunner (1949).

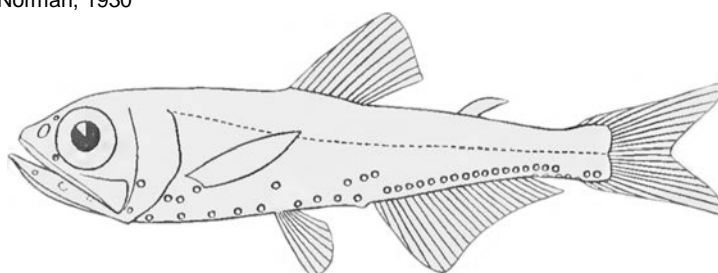


	references	general statements on the distribution of this species: <ul style="list-style-type: none"> o Hulley (1981): In the western South Atlantic...distributed between 36°19'S and 43°31'S and extends eastwards at least to about 10°W. It is therefore distributed in the region of the Subtropical Convergence ... narrow geographic range in the northern region of the subantarctic zone. o Fricke et al. (2024): southern circumglobal
<u>EEZ-AR</u>	references	mere listings for Argentina: <ul style="list-style-type: none"> o Menni et al. (1984): ref. to Angelescu & Cousseau (1969) o Chebez & Padilla (1999) o Cousseau & Rosso (2019) o Cousseau et al. (2020): ref. to Angelescu & Cousseau (1969) o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020) miscellanea: <ul style="list-style-type: none"> o Angelescu & Cousseau (1969): stomach content of <i>Merluccius hubbsi</i>, no distinct locality, no mentioned voucher specimens
	specimens	NHMD collection: <ul style="list-style-type: none"> o 1575202-08 348/71 Nielsen
	status	Evidence-based confirmation of previous records from EEZ-AR.
<u>EEZ-UY</u>	references	mere listings for Uruguay: <ul style="list-style-type: none"> o Nion et al. (2002, 2016)
	specimens	o none
	status	While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

P. parallelum (Lönnerberg, 1905) Parallel lanternfish
Myctophum parallelum Lönnerberg, 1905

- references general statements on the distribution of this species:
 - o Hulley (1981): ...has been reported from the western South Atlantic ... circumglobally distributed between the Subtropical Convergence and the Antarctic Convergence...
 - o Fricke et al. (2024): Southern circumglobal
- EEZ-AR references localities in EEZ-AR:
 - o McGinnis (1974, 1982): *Eltanin* 125, 1503
- specimens o none
- status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

P. tenisoni (Norman, 1930) Tenison's lanternfish
Myctophum tenisoni Norman, 1930



Myctophum tenisoni Norman, 1930
 Drawing from original description.

- references general statements on the distribution of this species:
 - o Hulley (1981): *Walther Herwig* data reveal that although *P. tenisoni* can be found as far north as 38°20'S, 54°33'W [EEZ-AR], its northern limit in the western South Atlantic generally lies between 45°S and 46°S. The species was recorded as far south as 59°51'S ... a broadly antarctic species...
 - o Fricke et al. (2024): southern circumglobal
- remarks Where specimens are available, a re-determination of the below listed records will possibly result in *P. luciferum*.

- EEZ-AR references localities in EEZ-AR:
 - o McGinnis (1974): *Eltanin* 348, 1503
 - o Hulley (1981): *Walther Herwig* 38°20'S, 54°33'W [348/71]
 - o McGinnis (1982): *Eltanin* 348, 1503
 mere listings for Argentina:
 - o Ringuélet & Arámburu (1960): sub *Myctophum t.*
 - o Menni et al. (1984): ref. to Angelescu & Cousseau (1969)
 - o Chebez & Padilla (1999)
 - o Cousseau & Rosso (2019)
 - o Cousseau et al. (2020): ref. to Figueroa et al. (1998)
 - o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020)
 non-type specimens from international waters:
 - o Cousseau et al. (2012): INIDEP 400, 40°29'S 49°33'W
 localities in EEZ-CL:
 - o Norman (1930): *Discovery* 217
 miscellanea:
 - o Angelescu & Cousseau (1969): sub *Electrona t.*, stomach content of *Merluccius hubbsi*, no distinct locality, no mentioned voucher specimens

- specimens o none
- status While still lacking a published evidence-based record, a distribution of this species in EEZ-AR should not be implied.

- EEZ-UY references mere listings for Uruguay:
 - o Nion et al. (2002, 2016)
- specimens o none
- status While still lacking a published evidence-based record, a distribution of this species in EEZ-UY should not be implied.

- FCZ-FK references non-type specimens from FCZ-FK:
 - o Cousseau et al. (2012): INIDEP 572, 53°37'S 60°34'W

localities from FCZ-FK:
 o Figueroa et al. (1998): 53°37'S 60°34'W

specimens o none

status Although this species has not been taken by the *Walther Herwig*, its presence in FCZ-FK is corroborated by vouchers housed at INIDEP.

Symbolophorus Bolin & Wisner, 1959

S. barnardi (Tåning, 1932) Barnard's lanternfish

Myctophum humboldti barnardi Tåning, 1932
Scopelus hookeri Whitley, 1953

references general statements on the distribution of this species:
 o Hulley (1981): ...taken mainly in the region of and north of the Subtropical Convergence and in the South Atlantic occurs between about 30°S and 40°S.
 o Fricke et al. (2024): southern circumglobal

EEZ-AR references mere listings for Argentina:
 o Cousseau & Rosso (2019)
 o Mabragaña & Cousseau (2021): ref. to Figueroa et al. (1998)

specimens ZMH collection:
 o 108997 348/71 Hulley

status Evidence-based confirmation of previous records from EEZ-AR.

EEZ-UY references mere listings for Uruguay:
 o Nion et al. (2002, 2016)
 localities in international waters:
 o Figueroa et al. (1998): 37°29'S 51°02'W

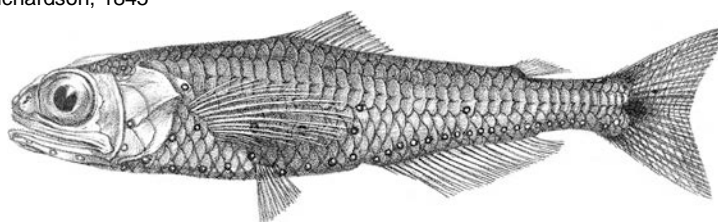
specimens ZMH collection:
 o 104173 197/66 Hulley
 o 104204 197/66 Hulley

status Evidence-based confirmation of previous records from EEZ-UY.

S. boops (Richardson, 1845) Bogue lanternfish

Myctophum boops Richardson, 1845

Myctophum boops Richardson, 1845
 Drawing from original description.
 Swapped horizontally.



references general statements on the distribution of this species:
 o Hulley (1981): According to *Walther Herwig* data, *S. boops* is distributed in the region of and south of the Subtropical Convergence in the western South Atlantic, where...it was taken between 35°56'S and 50°40'S...
 o Fricke et al. (2024): southern circumglobal

EEZ-AR references localities in EEZ-AR:
 o Stehmann & Schulze (1996): sub *Gymnoscopelus b.*, *Walther Herwig* 693/78
 mere listings for Argentina:
 o Menni et al. (1984): ref. to Angelescu & Cousseau (1969)
 o Chebez & Padilla (1999)
 o Cousseau & Rosso (2019)
 o Cousseau et al. (2020): ref. to Angelescu & Cousseau (1969)
 o Mabragaña & Cousseau (2021): ref. to Cousseau et al. (2020)
 miscellanea:
 o Angelescu & Cousseau (1969): stomach content of *Merluccius hubbsi*, no distinct locality, no mentioned voucher specimens

specimens USNM collection:

		o 206611	348/71	Hulley
	ZMH collection:	o 115492	503/78	Kreffft
		o 115514	518/78	Kreffft
		o 115515	504/78	Kreffft
		o 115516	517/78	Kreffft
		o 115600	693/78	Kreffft
	status	Evidence-based confirmation of previous records from EEZ-AR.		
<u>EEZ-UY</u>	references	mere listings for Uruguay:		
		o Nion et al. (2002, 2016)		
	specimens	ZMH collection:		
		o 104275	197/66	Hulley
		o 115677	707/78	Kreffft
		o 115694	700/78	Kreffft
	status	Evidence-based confirmation of previous records from EEZ-UY.		
<u>FCZ-FK</u>	references	o ?none		
	specimens	ZMH collection:		
		o 108143	295/71	Hulley
	status	Tentatively the first evidence-based record from FCZ-FK.		

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Koerber   

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