

# Species Information Systems

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World Biodiversity and European Taxonomy  
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# Species Information Systems

- The Catalogue of Life
- FishBase
- SeaLifeBase
- AlgaeBase
- SpeciesBase
- AquaMaps

# Relevance to Research Priorities

Proof of concept for

- Master lists of species
- Life histories and ecology
- Interactive identification keys
- Quality control
- Data services to experts
- Credit to original sources
- Open access, broad public use, citizen science
- Standardized Maps

[www.catalogueoflife.org](http://www.catalogueoflife.org)

# Species 2000 Catalogue of Life

Currently:

1,160,711 species

- animals
- plants
- fungi
- microorganisms

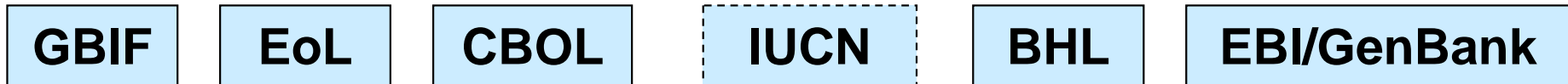
The screenshot displays the Species 2000 Catalogue of Life website. At the top, it reads "Species 2000 Catalogue of Life: 2009 Annual Checklist" with the tagline "indexing the world's known species". The ITIS logo is visible. Below the header is a banner with images of a butterfly, a squid, and a green leaf. The main content area is titled "Species details" and features an illustration of a cockroach under the heading "Blattodea Species File".

<b>Accepted scientific name:</b>	<i>Aeluropoda insignis</i> Butler 1882 (accepted name)
<b>Synonyms:</b>	<i>Aeluropoda gigantea</i> Butler 1882 (synonym) <i>Gromphadorhina hildebrandti</i> Dohrn 1887 (synonym)
<b>Common name:</b>	flat horned hissing cockroach English
<b>Classification:</b>	Animalia Phylum Arthropoda Class Insecta Order Blattodea Superfamily Blaberoidea Family Blaberidae Genus <i>Aeluropoda</i>
<b>Distribution:</b>	Madagascar (south-central)
<b>Additional data:</b>	-
<b>Source database:</b>	Blattodea Species File Online, 1.2/3.1, 30 July 2007
<b>Latest taxonomic scrutiny:</b>	Beccaloni GW, 30 July 2007
<b>Online resource:</b>	<a href="http://blattodea.speciesfile.org/">http://blattodea.speciesfile.org/...</a>

The cover of the 2009 Annual Checklist Catalogue of Life features a close-up photograph of a bee on a yellow flower. The text on the cover includes "CATALOGUE OF LIFE 2009 Annual Checklist" and "Species 2000". At the bottom, it states "...species from 66 databases". The ITIS logo is also present.

# Species 2000 Catalogue of Life

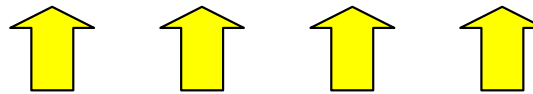
taxonomic backbone services to users worldwide



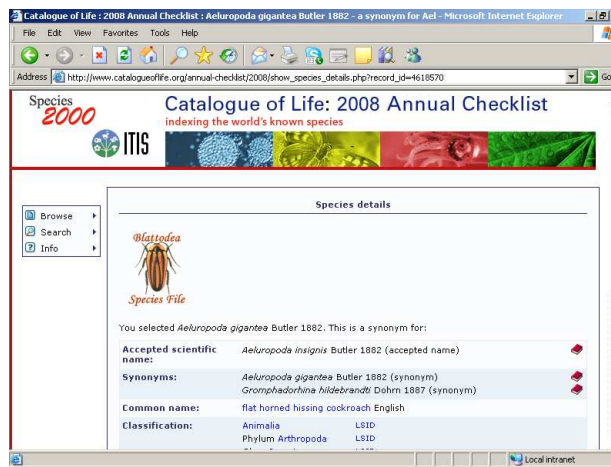
Global portals



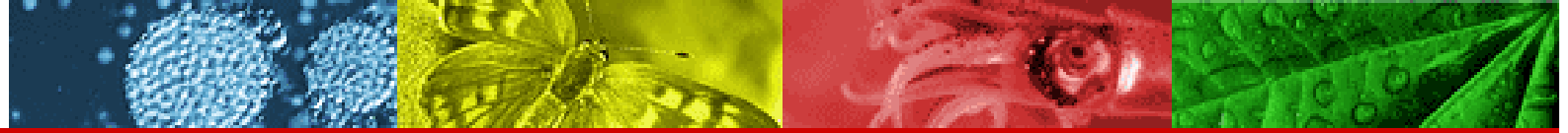
EU Infrastructures



**National Portals:**  
approx. 40



**Individual users:**  
40M hits per year;  
40,000 unique users per month;  
3,500 CDs per year to 79 countries



## 5 - year Development Plan: 2009 – 2014

### Phase 2 Catalogue of Life Programme

Approx. 12 M euro, including the new EC 4D4Life project and projects in China, Australia, Brazil and N. America

1. Cyber Infrastructure & Electronic Services Array
2. Strategy for Completing world coverage of the Catalogue
3. 2nd Edition, Catalogue of Life Taxonomic Hierarchy
4. World-wide Multi-Hub Network, with Regional Hubs
5. Participation in the Global Names Architecture  
(Proposed)

# 4D4Life: Distributed Dynamic Diversity Databases for Life



1. **The Main Objectives: to build a state-of-the-art e-infrastructure that:**
  - facilitates enhanced information exchange within the Species 2000 networks,
  - synthesises a significantly improved global resource, the *Catalogue of Life*.
  - disseminates this synthesised knowledge in a new array of modern web-services and products
  - takes the e-infrastructure to a sustainable future



[www.fishbase.org](http://www.fishbase.org)

Mirrors: [fishbase.org](#) | [fishbase.us](#) | [fishbase.de](#) | [fishbase.fi](#) | [fishbase.se](#) | [fishbase.tw](#) | [fishbase.cn](#) | [fishbase.gr](#)

[English](#) | [Español](#) | [Português \(Br, Pt\)](#) | [Français](#) | [Deutsch](#) | [Italiano](#) | [Nederlands](#) | [简体中文](#) | [繁體中文](#) | [More...](#)

# FishBase

( 31200 Species, 276500 Common names, 48000 Pictures,  
42900 References, 1690 Collaborators, 33 million Hits/month )

(04/2009)



[Home](#) | [FishBase Book](#) | [FishBase Tour](#) | [Best Photos](#) | [Hints](#) | [Guest Book](#) | [Download](#) | [Links](#) | [Fish Forum](#) | [Fish Quiz](#) |  
[FishWatcher](#) | [Ichthyology Course](#) | [LarvalBase](#) | [Team](#) | [Identification](#)

## Common Name

( e.g. rainbow trout )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[中文](#) | [العربية](#) | [Русский](#) | [日本語](#) | [हिन्दी](#) | [Ελληνικά](#) | [More scripts...](#)

## Scientific Name

**Genus**    ( e.g. Rhinocodon )

**Species**   ( e.g. typus )

**Genus + Species**  ( e.g. Tor soro )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

You can search names also in the independent [Catalog of Fishes](#).

To search without Genus, change Genus option from 'is' to 'contains'.

## Glossary

( e.g. oophagy )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## Information by Family

- Family info.
- Pictures
- References (FishBase)
- Graphs
- All fishes
- Identification
- Missing photos
- Species Ecology Matrix
- Nominal species
- Identification keys
- Stamps

Note: Lists may be incomplete. Some lists may be very long and will take time to load.

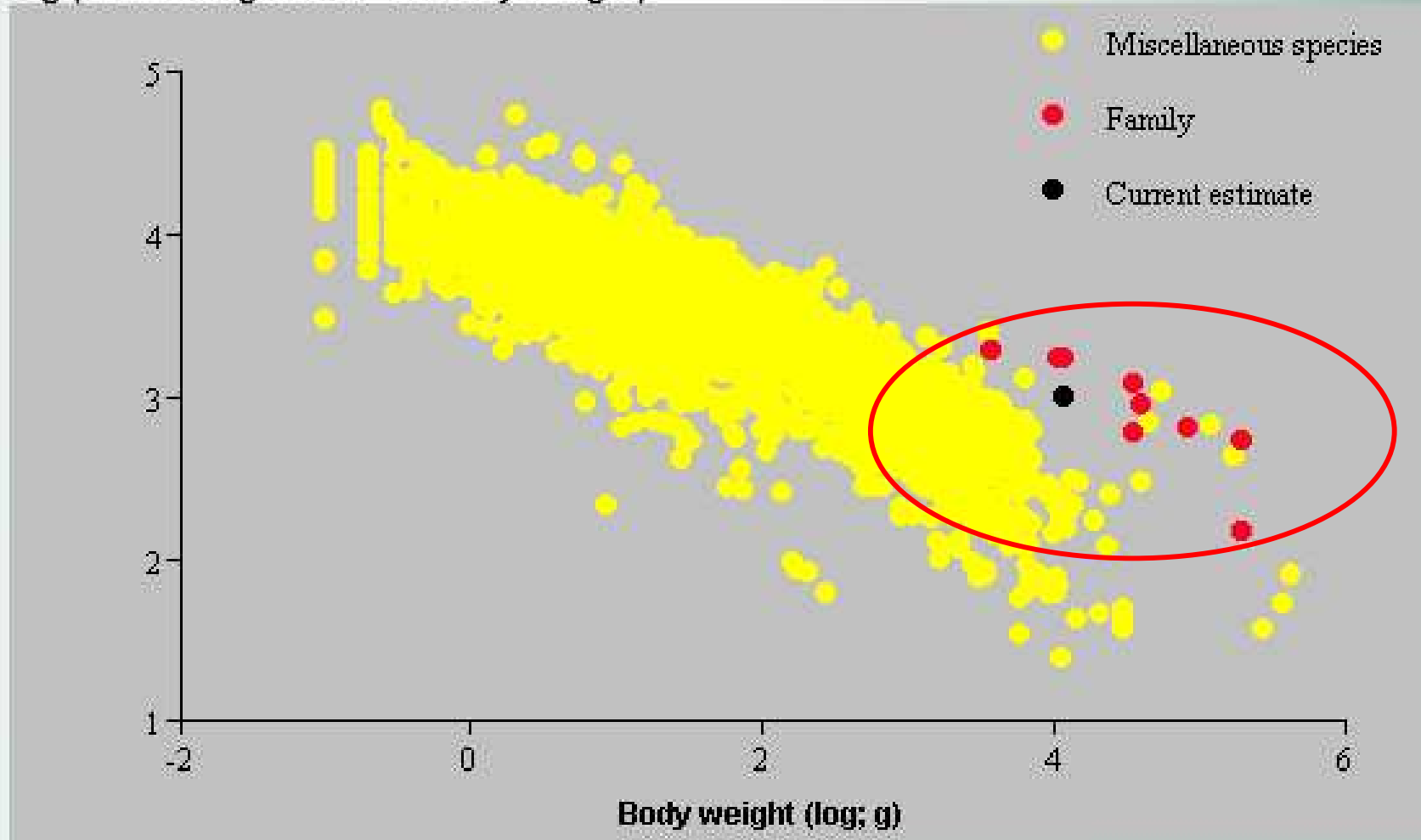
## Information by Country / Island

- | Biodiversity                          | Uses                                  | Tools  | Miscellaneous                              |
|---------------------------------------|---------------------------------------|--|--|
| <input type="radio"/> All fishes      | <input type="radio"/> Commercial      | <input type="radio"/> Identification         | <input type="radio"/> Country info         |
| <input type="radio"/> Freshwater      | <input type="radio"/> Aquaculture     | <input type="radio"/> Identification keys    | <input type="radio"/> FAO profile          |
| <input type="radio"/> Marine          | <input type="radio"/> Aquarium trade  | <input type="radio"/> Field guide            | <input type="radio"/> ReefBase profile     |
| <input type="radio"/> Introduced      | <input type="radio"/> Invasiveness    | <input type="radio"/> Occurrences            | <input type="radio"/> Treaties & Conv.     |
| <input type="radio"/> Endemic         | <input type="radio"/> Game fishes     | <input type="radio"/> Type localities        | <input type="radio"/> Collaborators        |
| <input type="radio"/> Threatened      | <input type="radio"/> FAO aquaculture | <input type="radio"/> References             | <input type="radio"/> Fish stamps          |
| <input type="radio"/> Dangerous       | <input type="radio"/> FAO catches     | <input type="radio"/> Missing data           | <input type="radio"/> Common names         |
| <input type="radio"/> Reef-associated | <input type="radio"/> ICES catch      | <input type="radio"/> Missing photos         | <input type="radio"/> Public aquariums     |
| <input type="radio"/> Pelagic         | <input type="radio"/> SAUP catch      | <input type="radio"/> Ecopath data           | <input type="radio"/> MPA database         |
| <input type="radio"/> Deep-water      | <input type="radio"/> Fish Loss       | <input type="radio"/> Species Ecology Matrix | <input type="radio"/> Spawning aggregation |
|                                       |                                       | <input type="radio"/> Checklist (extended)   |  |

Note: Lists may be incomplete. Some lists may be very long and will take time to load.

[About this graph...](#)

Encephalization Coefficient  
 $\log(\text{brain weight} \times 10^6 / \text{body weight})$



Relative brain weight graph for **Carcharhinidae**

[ n = 9; mean B/W = 2.51; W = 158.88 ]

Add estimate: B/W =  W =

[Download Data](#)

[Graphs by family](#)

[Back to Search](#)

## Information by Family

- |                                       |   |   |  |
|---------------------------------------|---|---|--|
| <input type="radio"/> Family info.    | <input type="radio"/> Pictures            | <input type="radio"/> References (FishBase) | <input type="radio"/> Graphs                 |
| <input type="radio"/> All fishes      | <input type="radio"/> Identification      | <input type="radio"/> Missing photos        | <input type="radio"/> Species Ecology Matrix |
| <input type="radio"/> Nominal species | <input type="radio"/> Identification keys | <input type="radio"/> Stamps                |  |

Note: Lists may be incomplete. Some lists may be very long and will take time to load.

## Information by Country / Island

- | Biodiversity                          | Uses                                  | Tools  | Miscellaneous                              |
|---------------------------------------|---------------------------------------|--|--|
| <input type="radio"/> All fishes      | <input type="radio"/> Commercial      | <input type="radio"/> Identification         | <input type="radio"/> Country info         |
| <input type="radio"/> Freshwater      | <input type="radio"/> Aquaculture     | <input type="radio"/> Identification keys    | <input type="radio"/> FAO profile          |
| <input type="radio"/> Marine          | <input type="radio"/> Aquarium trade  | <input type="radio"/> Field guide            | <input type="radio"/> ReefBase profile     |
| <input type="radio"/> Introduced      | <input type="radio"/> Invasiveness    | <input type="radio"/> Occurrences            | <input type="radio"/> Treaties & Conv.     |
| <input type="radio"/> Endemic         | <input type="radio"/> Game fishes     | <input type="radio"/> Type localities        | <input type="radio"/> Collaborators        |
| <input type="radio"/> Threatened      | <input type="radio"/> FAO aquaculture | <input type="radio"/> References             | <input type="radio"/> Fish stamps          |
| <input type="radio"/> Dangerous       | <input type="radio"/> FAO catches     | <input type="radio"/> Missing data           | <input type="radio"/> Common names         |
| <input type="radio"/> Reef-associated | <input type="radio"/> ICES catch      | <input type="radio"/> Missing photos         | <input type="radio"/> Public aquariums     |
| <input type="radio"/> Pelagic         | <input type="radio"/> SAUP catch      | <input type="radio"/> Ecopath data           | <input type="radio"/> MPA database         |
| <input type="radio"/> Deep-water      | <input type="radio"/> Fish Loss       | <input type="radio"/> Species Ecology Matrix | <input type="radio"/> Spawning aggregation |
|                                       |                                       | <input type="radio"/> Checklist (extended)   |  |

Note: Lists may be incomplete. Some lists may be very long and will take time to load.



## Aquaculture and Aquarium Fishes Which May Establish Themselves in [Czech Republic](#) [n = 29]

List of commercial aquaculture and aquarium fishes which match the environmental conditions in Czech Republic, and which have established themselves in at least one other country.

FB name
  Species
  Family
  Aquaculture
  Aquarium
  Max. length
  Productivity
  Other countries

Select: Czech Republic
▼
Percent established: 24%

FB name	Species	Family	Aquaculture	Aquarium	Max length (cm)	Temp. (°C)	Climate zone	Productivity	Established in countries	
									This	Other
<a href="#">Brook trout</a>	<a href="#">Salvelinus fontinalis</a>	Salmonidae	commercial	public aquariums	86	0 - 25	temperate	Med.	<a href="#">Yes</a>	<a href="#">38</a>
<a href="#">Bighead carp</a>	<a href="#">Hypophthalmichthys nobilis</a>	Cyprinidae	commercial	public aquariums	112	4 - 26	temperate	Med.	<a href="#">Yes</a>	<a href="#">32</a>
<a href="#">Pumpkinseed</a>	<a href="#">Lepomis gibbosus</a>	Centrarchidae	never/rarely	commercial	40	4 - 22	temperate	Med.	<a href="#">Yes</a>	<a href="#">31</a>
<a href="#">Stone moroko</a>	<a href="#">Pseudorasbora parva</a>	Cyprinidae	never/rarely	commercial	11	5 - 22	temperate	Med.	<a href="#">Yes</a>	<a href="#">30</a>
<a href="#">Brown bullhead</a>	<a href="#">Ameiurus nebulosus</a>	Ictaluridae	commercial	never/rarely	55	0 - 37	temperate	Med.	<a href="#">Yes</a>	<a href="#">26</a>
<a href="#">Black bullhead</a>	<a href="#">Ameiurus melas</a>	Ictaluridae	commercial	never/rarely	66	8 - 30	temperate	Med.	No	<a href="#">21</a>
<a href="#">Common whitefish</a>	<a href="#">Coregonus lavaretus</a>	Salmonidae	commercial	never/rarely	73	4 - 16	temperate	Med.	<a href="#">Yes</a>	<a href="#">14</a>
<a href="#">Striped bass</a>	<a href="#">Morone saxatilis</a>	Moronidae	commercial	never/rarely	200	8 - 25	temperate	Low	No	<a href="#">10</a>
<a href="#">Round goby</a>	<a href="#">Neogobius melanostomus</a>	Gobiidae	never/rarely	commercial	25	4 - 20	temperate	Med.	No	<a href="#">9</a>
<a href="#">Lake trout</a>	<a href="#">Salvelinus namaycush</a>	Salmonidae	commercial	never/rarely	150		temperate	Low	No	<a href="#">9</a>
<a href="#">Coho salmon</a>	<a href="#">Oncorhynchus kisutch</a>	Salmonidae	commercial	never/rarely	108	0 - 25	temperate	Med.	No	<a href="#">8</a>
<a href="#">So-iyu mullet</a>	<a href="#">Mugil soiyu</a>	Mugilidae	commercial	never/rarely	80		temperate	Med.	No	<a href="#">7</a>
<a href="#">Chinook salmon</a>	<a href="#">Oncorhynchus tshawytscha</a>	Salmonidae	commercial	public aquariums	150	0 - 25	temperate	Med.	No	<a href="#">7</a>
<a href="#">Bigmouth buffalo</a>	<a href="#">Ictiobus cyprinellus</a>	Catostomidae	commercial		123		temperate	Low	No	<a href="#">6</a>
<a href="#">Charr</a>	<a href="#">Salvelinus alpinus alpinus</a>	Salmonidae	commercial	never/rarely	107	4 - 16	temperate	Low	No	<a href="#">6</a>
<a href="#">Eastern mudminnow</a>	<a href="#">Umbra pinnacea</a>	Umbridae	never/rarely	commercial	12	4 - 23	temperate	Med.	No	<a href="#">6</a>
<a href="#">Chum salmon</a>	<a href="#">Oncorhynchus keta</a>	Salmonidae	commercial	public aquariums	100	0 - 24	temperate	Med.	No	<a href="#">5</a>
<a href="#">Redbreast sunfish</a>	<a href="#">Lepomis auritus</a>	Centrarchidae	never/rarely	commercial	31	4 - 22	temperate	Med.	No	<a href="#">4</a>
<a href="#">Golden grey mullet</a>	<a href="#">Liza aurata</a>	Mugilidae	commercial		59		temperate	Med.	No	<a href="#">4</a>
<a href="#">Sockeye salmon</a>	<a href="#">Oncorhynchus nerka</a>	Salmonidae	commercial	public aquariums	84	0 - 25	temperate	Med.	No	<a href="#">3</a>
<a href="#">Japanese (white) crucian carp</a>	<a href="#">Carassius cuvieri</a>	Cyprinidae	commercial	never/rarely	35		temperate	Med.	No	<a href="#">2</a>
<a href="#">Maraena whitefish</a>	<a href="#">Coregonus maraena</a>	Salmonidae	commercial	never/rarely	130		temperate	Med.	<a href="#">Yes</a>	<a href="#">1</a>
<a href="#">White sturgeon</a>	<a href="#">Acipenser transmontanus</a>	Acipenseridae	commercial	never/rarely	610	0 - 23	temperate	Very low	No	<a href="#">1</a>
<a href="#">Brook stickleback</a>	<a href="#">Culaea inconstans</a>	Gasterosteidae	never/rarely	commercial	9	4 - 18	temperate	High	No	<a href="#">1</a>
<a href="#">Japanese smelt</a>	<a href="#">Hypomesus nipponensis</a>	Osmeridae	commercial	never/rarely	17		temperate	High	No	<a href="#">1</a>
<a href="#">Thinlip mullet</a>	<a href="#">Liza ramado</a>	Mugilidae	commercial	never/rarely	70		temperate	Low	No	<a href="#">1</a>
<a href="#">Cutthroat trout</a>	<a href="#">Oncorhynchus clarkii clarkii</a>	Salmonidae	commercial	public aquariums	99	23	temperate	Med.	No	<a href="#">1</a>
<a href="#">Cherry salmon</a>	<a href="#">Oncorhynchus masou masou</a>	Salmonidae	commercial	never/rarely	79		temperate	Med.	No	<a href="#">1</a>
<a href="#">Kutum</a>	<a href="#">Rutilus frisii</a>	Cyprinidae	commercial	never/rarely	70		temperate	Low	No	<a href="#">1</a>

## Information by Family

<input type="radio"/> Family info.	<input type="radio"/> Pictures	<input type="radio"/> References (FishBase)	<input type="radio"/> Graphs
<input type="radio"/> All fishes	<input type="radio"/> Identification	<input type="radio"/> Missing photos	<input type="radio"/> Species Ecology Matrix
<input type="radio"/> Nominal species	<input type="radio"/> Identification keys	<input type="radio"/> Stamps	

Note: Lists may be incomplete. Some lists may be very long and will take time to load.

## Information by Country / Island

Biodiversity	Uses	Tools	Miscellaneous
<input type="radio"/> All fishes	<input type="radio"/> Commercial	<input type="radio"/> Identification	<input type="radio"/> Country info
<input type="radio"/> Freshwater	<input type="radio"/> Aquaculture	<input type="radio"/> Identification keys	<input type="radio"/> FAO profile
<input type="radio"/> Marine	<input type="radio"/> Aquarium trade	<input type="radio"/> Field guide	<input type="radio"/> ReefBase profile
<input type="radio"/> Introduced	<input type="radio"/> Invasiveness	<input type="radio"/> Occurrences	<input type="radio"/> Treaties & Conv.
<input type="radio"/> Endemic	<input type="radio"/> Game fishes	<input type="radio"/> Type localities	<input type="radio"/> Collaborators
<input type="radio"/> Threatened	<input type="radio"/> FAO aquaculture	<input type="radio"/> References	<input type="radio"/> Fish stamps
<input type="radio"/> Dangerous	<input type="radio"/> FAO catches	<input type="radio"/> Missing data	<input type="radio"/> Common names
<input type="radio"/> Reef-associated	<input type="radio"/> ICES catch	<input type="radio"/> Missing photos	<input type="radio"/> Public aquariums
<input type="radio"/> Pelagic	<input type="radio"/> SAUP catch	<input type="radio"/> Ecopath data	<input type="radio"/> MPA database
<input type="radio"/> Deep-water	<input type="radio"/> Fish Loss	<input type="radio"/> Species Ecology Matrix	<input type="radio"/> Spawning aggregation
		<input type="radio"/> Checklist (extended)	

Note: Lists may be incomplete. Some lists may be very long and will take time to load.



FAO Area	Order	Family	KeyName
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to Stage 1: free embryos).
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to Stage 3: intermediate larvae).
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to Stage 5: young juveniles).
Europe - Inland waters			Key to the main groups of European freshwater fishes [Bony Fish].
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to developmental stages).
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to Stage 2: young larvae).
Europe - Inland waters			Keys to the larval and juvenile stages of coarse fishes from fresh waters in the British Isles (Key to Stage 4: older larvae).
Europe - Inland waters			Key to the main groups [of European freshwater fishes].
Europe - Inland waters	Acipenseriformes	Acipenseridae	Key to the main groups of European freshwater fishes [Key to the Sturgeons].
Europe - Inland waters	Cypriniformes	Cyprinidae	Key to the species of <i>Pseudophoxinus</i> in Greece.
Europe - Inland waters	Cypriniformes	Cyprinidae	Key to the main groups of European freshwater fishes [Key to the Carp family].
Europe - Inland waters	Cypriniformes	Cyprinidae	Key to <i>Barbus</i> species in Italy.
Europe - Inland waters	Salmoniformes	Salmonidae	Key to the main groups of European freshwater fishes [Key to the Salmon family].



## Information by Ecosystem

- All fishes
- Point data
- Ecosystem info
- Resilience of fishes
- Trophic pyramids
- Species Ecology Matrix
- Deep-water
- Ecopath parameters
- Identification
- Identification keys

Note: Lists may be incomplete. Some lists may be very long and will take time to load

## Information by Topic

- | Trophic ecology                        | Life history                             | Uses                                       | Miscellaneous                                |
|--|--|--|--|
| <input type="radio"/> Diet             | <input type="radio"/> Growth             | <input type="radio"/> Aquaculture          | <input type="radio"/> Treaties & Conv.       |
| <input type="radio"/> Food items       | <input type="radio"/> L-W relationship   | <input type="radio"/> Aquaculture profiles | <input type="radio"/> CITES                  |
| <input type="radio"/> Food consumption | <input type="radio"/> Length frequencies | <input type="radio"/> Introductions        | <input type="radio"/> CMS                    |
| <input type="radio"/> Ration           | <input type="radio"/> Recruitment        | <input type="radio"/> Diseases             | <input type="radio"/> National databases     |
| <input type="radio"/> Predators        | <input type="radio"/> Reproduction       | <input type="radio"/> Ciguatera            | <input type="radio"/> Names by Language      |
| <b>Physiology/Behavior</b>             | <input type="radio"/> Maturity           | <input type="radio"/> Processing           | <input type="radio"/> Collaborators          |
| <input type="radio"/> Metabolism       | <input type="radio"/> Spawning           | <input type="radio"/> Ecotoxicology        | <input type="radio"/> Public aquariums       |
| <input type="radio"/> Gill area        | <input type="radio"/> Eggs               | <input type="radio"/> Genetics             | <input type="radio"/> Expeditions            |
| <input type="radio"/> Brains           | <input type="radio"/> Egg dev.           | <input type="radio"/> Allele frequencies   | <input type="radio"/> Video                  |
| <input type="radio"/> Vision           | <input type="radio"/> Larvae             | <input type="radio"/> Heritability         | <input type="radio"/> Fish stamps            |
| <input type="radio"/> Fish sounds      | <input type="radio"/> Larval dynamics    | <input type="radio"/> Otoliths             | <input type="radio"/> Uploaded photos online |
| <input type="radio"/> Swim. speed      |  |  |  |

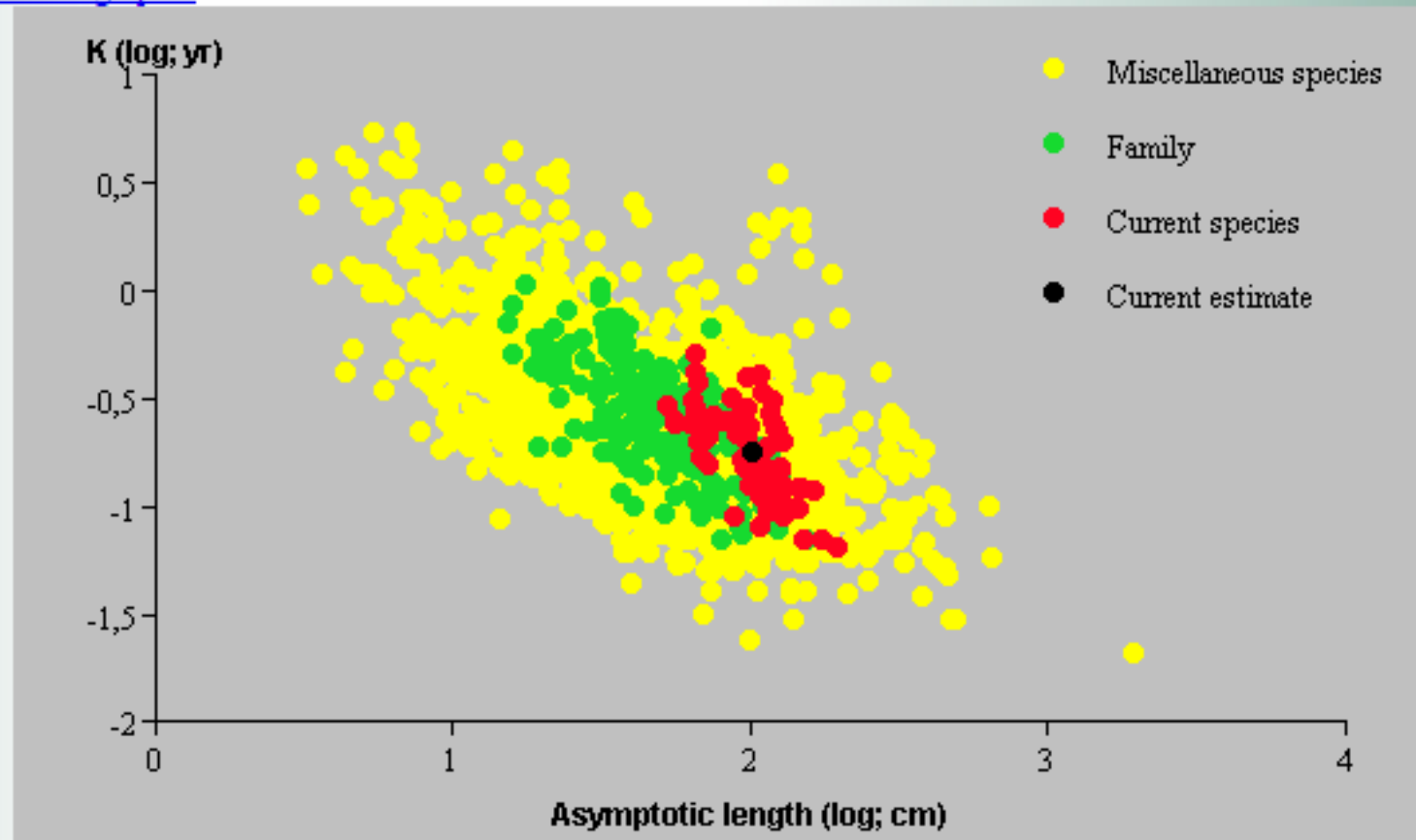
Note: Lists may be incomplete. Some lists may be very long and will take time to load.

# Growth Parameters

[ n=1991 ] Sort by  Species  English Name  Family

Species	English Name	Family
<a href="#">Abbottina rivularis</a>	Chinese false gudgeon	Cyprinidae
<a href="#">Ablennes hians</a>	Flat needlefish	Belontiidae
<a href="#">Abramis brama</a>	Common bream	Cyprinidae
<a href="#">Abramis sapa</a>	White-eye bream	Cyprinidae
<a href="#">Abudefduf vaigiensis</a>	Indo-Pacific sergeant	Pomacentridae
<a href="#">Abyssocottus korotneffi</a>		Abyssocottidae
<a href="#">Acanthalburnus microlepis</a>	Blackbrow bleak	Cyprinidae
<a href="#">Acanthobrama terraesanctae</a>	Kinneret bleak	Cyprinidae
<a href="#">Acanthochaenus luetkenii</a>	Pricklefish	Stephanoberycidae
<a href="#">Acanthoclinus littoreus</a>	Rockfish	Plesiopidae
<a href="#">Acanthocybium solandri</a>	Wahoo	Scombridae
<a href="#">Acanthopagrus australis</a>	Surf bream	Sparidae
<a href="#">Acanthopagrus berda</a>	Picnic seabream	Sparidae
<a href="#">Acanthopagrus bifasciatus</a>	Twobar seabream	Sparidae
<a href="#">Acanthopagrus butcheri</a>	Southern black bream	Sparidae
<a href="#">Acanthopagrus latus</a>	Yellowfin seabream	Sparidae
<a href="#">Acanthurus auranticavus</a>	Orange-socket surgeonfish	Acanthuridae
<a href="#">Acanthurus bahianus</a>	Ocean surgeon	Acanthuridae
<a href="#">Acanthurus blochii</a>	Ringtail surgeonfish	Acanthuridae
<a href="#">Acanthurus chirurgus</a>	Doctorfish	Acanthuridae
<a href="#">Acanthurus coeruleus</a>	Blue tang surgeonfish	Acanthuridae
<a href="#">Acanthurus dussumieri</a>	Eyestripe surgeonfish	Acanthuridae
<a href="#">Acanthurus leucosternon</a>	Powderblue surgeonfish	Acanthuridae
<a href="#">Acanthurus lineatus</a>	Lined surgeonfish	Acanthuridae
<a href="#">Acanthurus mata</a>	Elongate surgeonfish	Acanthuridae
<a href="#">Acanthurus nigricans</a>	Whitecheek surgeonfish	Acanthuridae
<a href="#">Acanthurus nigricauda</a>	Epaulette surgeonfish	Acanthuridae
<a href="#">Acanthurus nigrofuscus</a>	Brown surgeonfish	Acanthuridae
<a href="#">Acanthurus pyroferus</a>	Chocolate surgeonfish	Acanthuridae
<a href="#">Acanthurus triostegus</a>	Convict surgeonfish	Acanthuridae
<a href="#">Acanthurus xanthopterus</a>	Yellowfin surgeonfish	Acanthuridae
<a href="#">Acestrorhynchus lacustris</a>		Acestrorhynchidae

[About this graph...](#)



Auximetric plot for *Gadus morhua* and Gadidae

[ n = 78; mean K = 0.18; Linf = 102.05 ]

Add estimate: K =  Linf =

[Download Data](#)

← Growth parameters list

## Tools

- |  |   |  |   |
|--|---|--|---|
| <input type="radio"/> Identification                               | <input type="radio"/> Match names           | <input type="radio"/> ISSCAAP Troph          | <input type="radio"/> Fish collections                        |
| <input type="radio"/> Identification keys                          | <input type="radio"/> Disease diagnosis     | <input type="radio"/> FAO aquaculture        | <input type="radio"/> Collection History                      |
| <input type="radio"/> Adverse introductions                        | <input type="radio"/> My Fish Page          | <input type="radio"/> FAO catches            | <input type="radio"/> Trophic pyramids                        |
| <input type="radio"/> Global introductions                         | Life-history tool                           | <input type="radio"/> Catch analysis         | <input type="radio"/> Ecopath parameters                      |
| <input type="radio"/> Invasiveness                                 | L-F Analysis                                | <input type="radio"/> ICES catch             | <input type="radio"/> AquaMaps                                |
| <input type="radio"/> Species by ecosystem                         | <input type="radio"/> Information gaps      | <input type="radio"/> Fish statistics        | <input type="radio"/> New species                             |
| <input type="radio"/> Graphs                                       | <input type="radio"/> Sea Around Us         | <input type="radio"/> World records          | <input type="radio"/> New photos                              |
| <input type="radio"/> SeaFood Advisory                             | <input type="radio"/> FishBase for Americas | <input type="radio"/> Country codes          | <input type="radio"/> Web Stats                               |
| <input type="radio"/> Shifting Baselines WP2 - Online Toolset      | <input type="radio"/> FishBase for Africa   | <input type="radio"/> Catalogue of Life 2006 | <input type="radio"/> Top 100                                 |
| <input type="radio"/> Preferred algae/plants of herbivorous fishes |   |  | <input type="radio"/> Coastal Transects Analysis Model (CTAM) |

Note: Tools without radio button are available from the Species Summary page.

## References

Author   ( e.g. Randall)

[A](#)[B](#)[C](#)[D](#)[E](#)[F](#)[G](#)[H](#)[I](#)[J](#)[K](#)[L](#)[M](#)[N](#)[O](#)[P](#)[Q](#)[R](#)[S](#)[T](#)[U](#)[V](#)[W](#)[X](#)[Y](#)[Z](#)

Year

Title  ( e.g. Gilbert Islands)

Source

RefNo  ( e.g. 32 or 32, 123, 2700)

[Fish Journals](#) [ICES papers](#)

You can search references also in the independent [Catalog of Fishes](#).

## Associated Journal

[Acta Ichthyologica et Piscatoria](#) welcomes short communications on growth, weight-length relationships, reproduction (maturity, fecundity, spawning), diet composition, introductions and range extensions for subsequent entry in FishBase.

## References Citing FishBase

### How to cite FishBase

To give due credit to the original authors, please cite data taken from FishBase by Main Ref. and/or Data Ref. of the respective record.

### Cite FishBase itself as

Froese, R. and D. Pauly. Editors. 2009. FishBase.

World Wide Web electronic publication.

[www.fishbase.org](http://www.fishbase.org), version (04/2009).

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Note: FishBase is also available on CD-ROM, with detailed information on population dynamics, genetics, morphology, trophic ecology, physiology, ecotoxicology, reproduction, etc. See the FishBase [homepage](#) or the FishBase [book](#) for more information. FishBase was assembled with the help of many [partners](#) and with the support of the [European Commission](#) and other [sponsors](#). Contact us if you want to provide [pictures](#), [data](#) or [reprints](#).



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# FishBase

( 31200 Species, 276500 Common names, 48000 Pictures,  
42900 References, 1690 Collaborators, 33 million Hits/month )

(04/2009)

[Home](#) | [FishBase Book](#) | [FishBase Tour](#) | [Best Photos](#) | [Hints](#) | [Guest Book](#) | [Download](#) | [Links](#) | [Fish Forum](#) | [Fish Quiz](#) |  
[FishWatcher](#) | [Ichthyology Course](#) | [LarvalBase](#) | [Team](#) | [Identification](#)

## Common Name

( e.g. rainbow trout )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[中文](#) [العربية](#) [Русский](#) [日本語](#) [हिन्दी](#) [Ελληνικά](#) | [More scripts...](#)

## Scientific Name

**Genus**    ( e.g. Rhinocodon )

**Species**   ( e.g. typus )

**Genus + Species**  ( e.g. Tor soro )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

You can search names also in the independent [Catalog of Fishes](#).

To search without Genus, change Genus option from 'is' to 'contains'.

## Glossary

( e.g. oophagy )

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Note: This is the new look of the species summary page. Although this page has been reviewed already you might still encounter some bugs or errors. In that case, kindly report them [here](#).

[About this page](#) | [Languages](#) | [Feedback](#) | [Citation](#) | [Upload](#) | [Related species](#) | [Search page](#)

## *Gadus morhua* Linnaeus, 1758

### Atlantic cod

[Catalog of Fishes](#) | [ITIS](#) | [CoL](#)

<b>Classification</b>	<a href="#">Chordata</a>   <a href="#">Actinopterygii</a>   <a href="#">Gadidae</a>
<b>Synonyms</b>	<a href="#">Gadus morhua morhua</a> , <a href="#">Gadus arenosus</a> , <a href="#">Gadus callarias</a> , ... <a href="#">more</a>
<b>Common names</b>	<a href="#">Morue de l'Atlantique</a> , <a href="#">Bacalao del Atlántico</a> , <a href="#">Old soaker</a> , ... <a href="#">more</a>

[Upload your photos and videos](#)

[All pictures](#) | [Google image](#) | [Stamps](#)

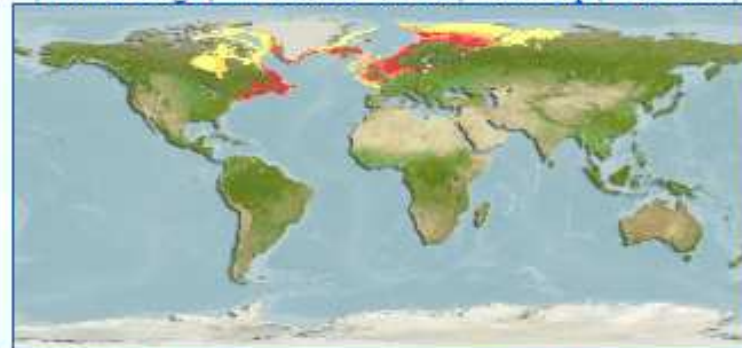


Picture by [Morris, P.](#)



[Add your observation in Fish Watcher](#)

[Native range](#) | [All suitable habitat](#) | [PointMap](#) | [Year 2050](#)



[AquaMaps](#) Data sources: [GBIF](#) [OBIS](#)

#### Main reference

[Cohen, D.M., T. Inada, T. Iwamoto and N. Scialabba. 1990. \(Ref. 1371\)](#)

[Other references](#) | [Biblio](#) | [Coordinator](#) | [Collaborators](#)

#### Size / Weight / Age

200 cm TL male/unsexed; (Ref. [1371](#)); max. published weight: 96.0 kg (Ref. [9988](#)); max. reported age: 25 years (Ref. [173](#))

## Environment

Benthopelagic; oceanodromous (Ref. 51243); brackish; marine; depth range 0 - 600 m (Ref. 1371), usually 150 - 200 m (Ref. 54441)

## Climate / Range

Temperate; ? - 20°C (Ref. 9988); 80°N - 35°N, 95°W - 61°E (Ref. 1371)

## Distribution

Northwest to Northeast Atlantic: Cape Hatteras to Ungava Bay along the North American coast; east and west coast of Greenland; around Iceland; coasts of Europe from the Bay of Biscay to the Barents Sea, including the region around Bear Island.

[Countries](#) | [FAO areas](#) | [Ecosystems](#) | [Occurrences](#) | [Introductions](#)

## Short description

**Dorsal spines** (total): 0; **Dorsal soft rays** (total): 44 - 55; **Anal spines**: 0; **Anal soft rays**: 33 - 45; **Vertebrae**: 51 - 55. Light lateral line, curved above pectorals. Predorsal distance less than 1/3 of TL. Color varies from brownish to greenish or gray dorsally and on upper sides, becoming pale ventrally. Peritoneum silvery.

## Biology

### Glossary


 (e.g. epibenthic)

Epibenthic-pelagic (Ref. 58426). This species is widely distributed in a variety of habitats, from the shoreline down to the continental shelf. Cod form schools during the day. Cod are omnivorous; they feed at dawn or dusk on invertebrates and fish, including young cod. Cod spawn once a year, in batches (Ref. 51846). They are marketed fresh, dried or salted, smoked and frozen; they are eaten steamed, fried, broiled, boiled, microwaved and baked (Ref. 9988). The most important stocks are the Norwegian Arctic stock in the Barents Sea and the Icelandic stock. The populations around Greenland and Newfoundland have declined dramatically (Ref. 35388). Over 12 nucleotide substitutions in the 307 base pair region of the mitochondrial cytochrome b gene differentiate this species from *Gadus ogac* (Ref. 40214).

## IUCN Red List Status (Ref. 57073)

 Vulnerable (VU) (A1bd)

## Threat to humans

 Harmless

## Human uses

Fisheries: highly commercial; aquaculture: commercial; gamefish: yes



### More information

<a href="#">Ecology</a>	<a href="#">Reproduction</a>	<a href="#">AgeSize</a>	<a href="#">Aquaculture</a>	<a href="#">Ciguatera</a>
<a href="#">Diet</a>	<a href="#">Maturity</a>	<a href="#">Growth</a>	<a href="#">Aquaculture profile</a>	<a href="#">Speed</a>
<a href="#">Food items</a>	<a href="#">Spawning</a>	<a href="#">Length-weight</a>	<a href="#">Strains</a>	<a href="#">Swim. type</a>
<a href="#">Food consumption</a>	<a href="#">Eggs</a>	<a href="#">Length-length</a>	<a href="#">Genetics</a>	<a href="#">Gill area</a>
<a href="#">Ration</a>	<a href="#">Egg development</a>	<a href="#">Length-frequencies</a>	<a href="#">Allele frequencies</a>	<a href="#">Brains</a>
<a href="#">Metabolism</a>	<a href="#">Larvae</a>	<a href="#">Morphometrics</a>	<a href="#">Heritability</a>	<a href="#">Vision</a>
<a href="#">Predators</a>	<a href="#">Larval dynamics</a>	<a href="#">Morphology</a>	<a href="#">Diseases</a>	
<a href="#">Ecotoxicology</a>	<a href="#">Recruitment</a>		<a href="#">Processing</a>	

### Tools

[Biogeographic modelling](#) | [Bio-Quiz](#) | [E-book](#) | [Field guide](#) | [Identification keys](#) | [Length-frequency wizard](#) | [Life-history tool](#) | [Point map](#)

### Special reports

[Check for Aquarium maintenance](#) | [Check for Species Fact Sheets](#) | [Check for Aquaculture Fact Sheets](#)

### Download XML

[Summary page](#) | [Point data](#) | [Common names](#) | [Photos](#)

### Internet sources

[BOLDSystems](#) | [Check for other websites](#) | [Check FishWatcher](#) | [CISTI](#) | [DiscoverLife](#) | [ECOTOX](#) | [FAO\(Aquaculture: production; Fisheries: landing statistics, species profile\)](#) | [GenBank\(genome, nucleotide\)](#) | [GOBASE](#) | [Google Books](#) | [Google Scholar](#) | [Google](#) | [ispecies](#) | [National databases](#) | [Public aquariums](#) | [PubMed](#) | [RFE Identification](#) | [Scirus](#) | [Sea Around Us](#) | [SeaLifeBase](#) | [Tree of Life](#) | [uBio](#) | [uBio RSS](#) | [Wikipedia\(Go, Search\)](#) | [Zoological Record](#)

## Estimation of some characteristics with mathematical models

### Resilience (Ref. [69278](#))

High, minimum population doubling time less than 15 months (rm=0.2-1.1; also Musick et al. 2000 (Ref. [36717](#)))

### Vulnerability (Ref. [59153](#))

High to very high vulnerability (68 of 100)

### Price category (Ref. [80766](#))

Medium

---

Entered by [Luna, Susan M.](#)

Modified by [Agbayani, Eli](#)

---

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FishBase mirror site : Stockholm, Sweden

Page last modified by : [elaxamana](#), 14 May 2009

To: [rfroese@ifm-geomar.de](mailto:rfroese@ifm-geomar.de)

From:

E-mail:

(optional)

Also show message to FishBase users.

Subject: **Comments & Corrections**

Page from:

[HTTP://www.fishbase.org/Summary/speciesSummary.php?ID=69&genusname=Gadus&speciesname=morhua](http://www.fishbase.org/Summary/speciesSummary.php?ID=69&genusname=Gadus&speciesname=morhua)

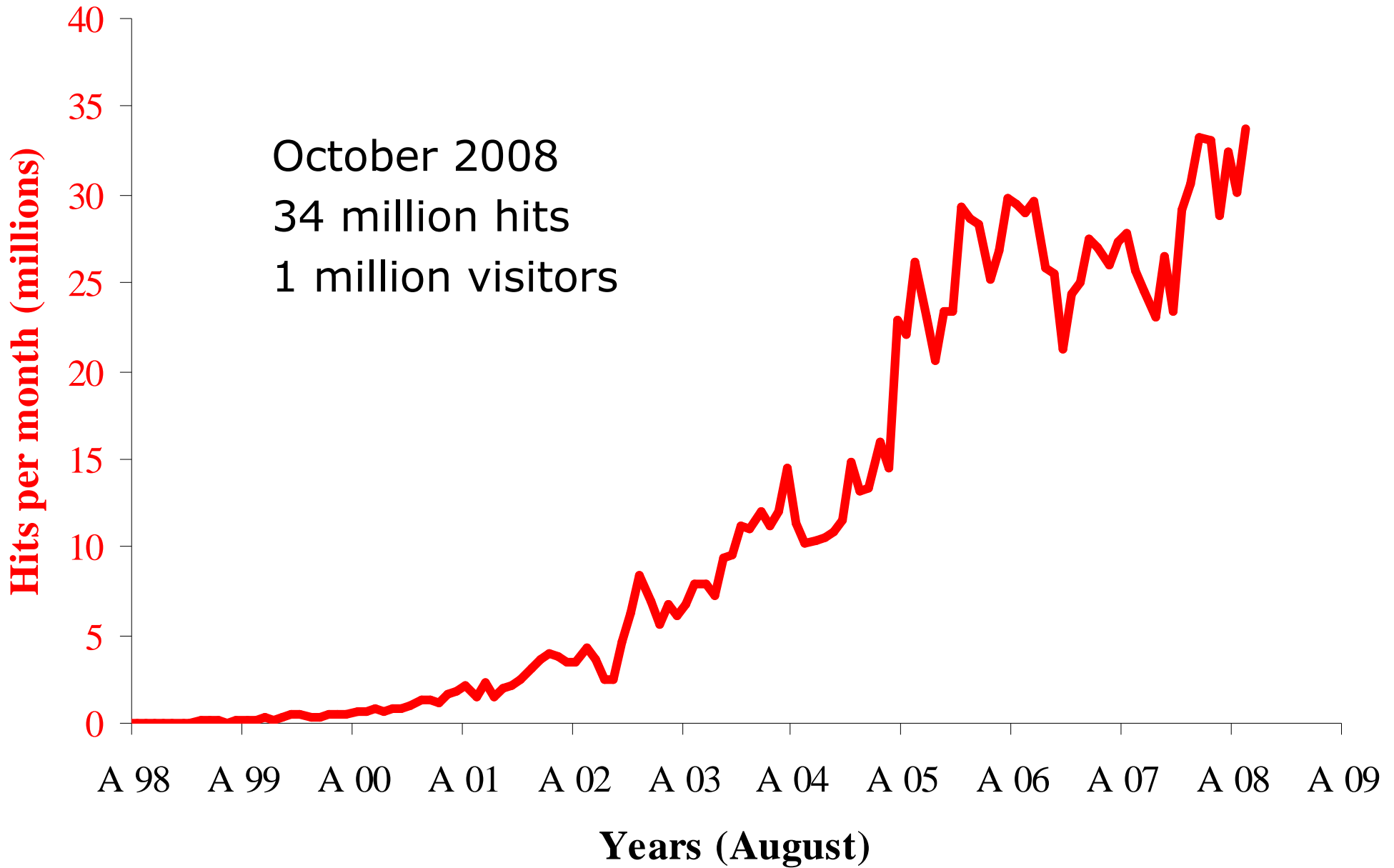
Message starts here:

Send Mail

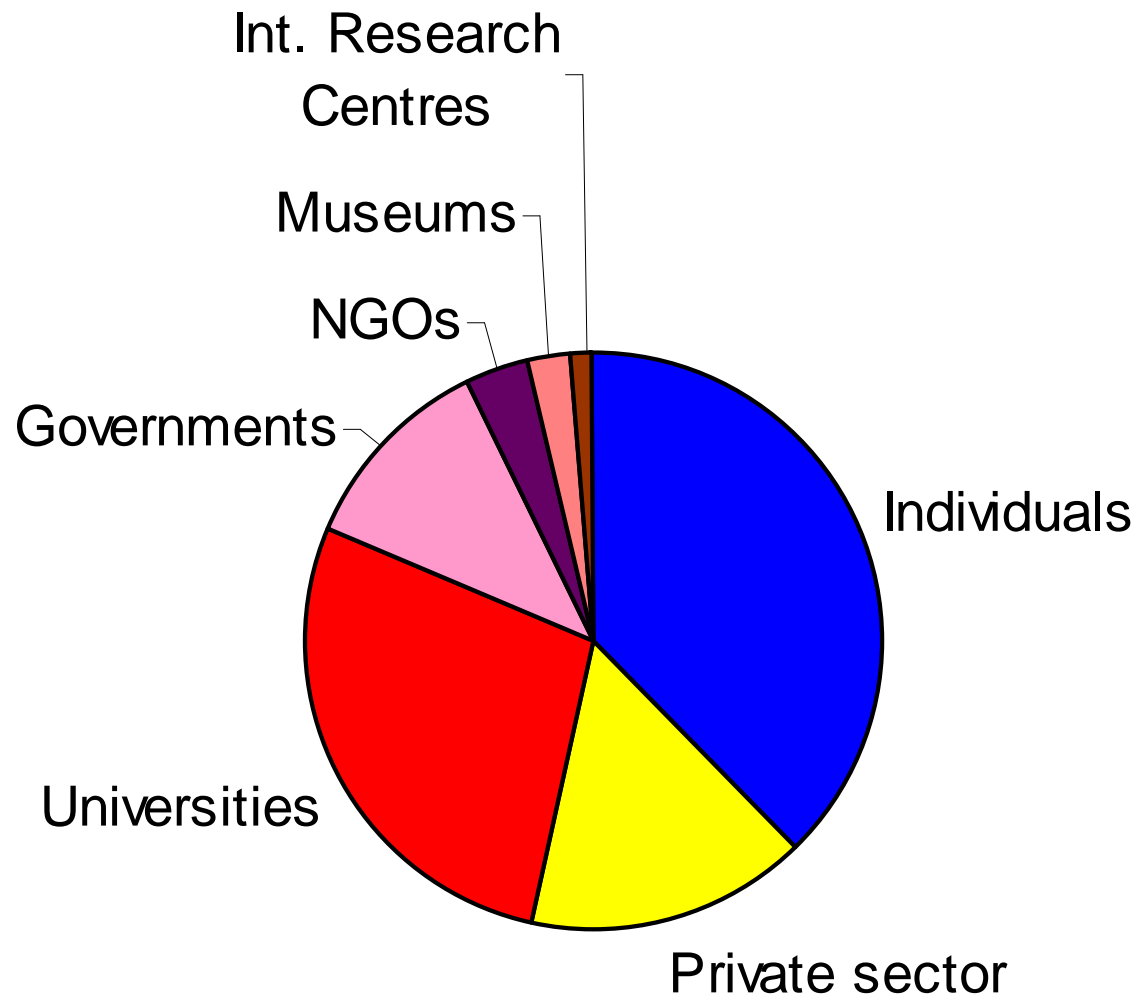
Reset

Cancel

# Hits per Month on FishBase



# FishBase Web Users



Based on 2787 entries in the FishBase Guestbook, March 2007

# How did they find us?

All traffic sources sent a total of 500,729 visits



23.30% Direct Traffic



25.98% Referring Sites



50.72% Search Engines



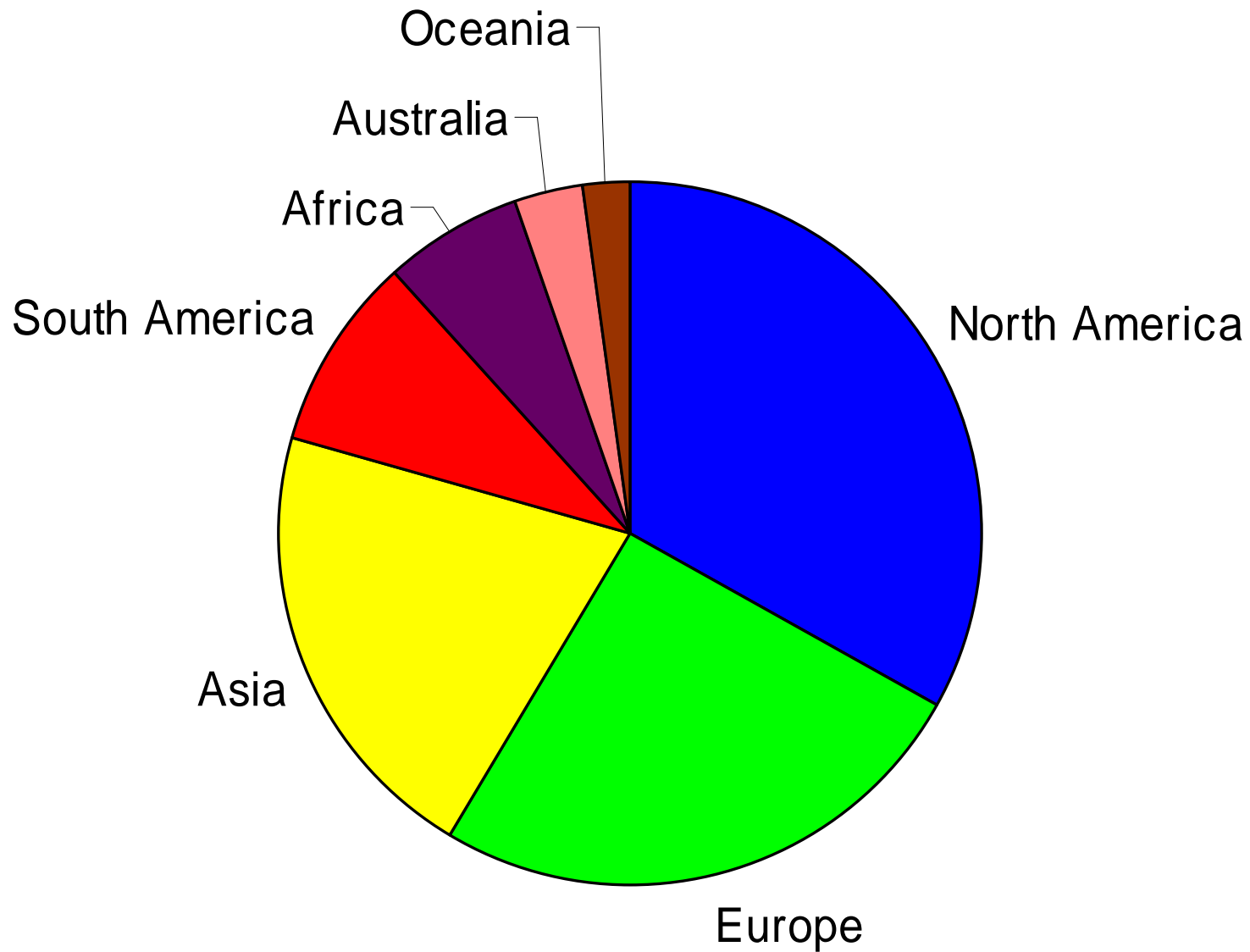
■ Search Engines  
253,971.00 (50.72%)  
■ Referring Sites  
130,076.00 (25.98%)  
■ Direct Traffic  
116,682.00 (23.30%)

## Top Traffic Sources

Sources	Visits	% visits
google (organic)	231,464	46.23%
(direct) ((none))	116,682	23.30%
fishbase.org (referral)	14,802	2.96%
en.wikipedia.org (referral)	11,021	2.20%
yahoo (organic)	10,588	2.11%

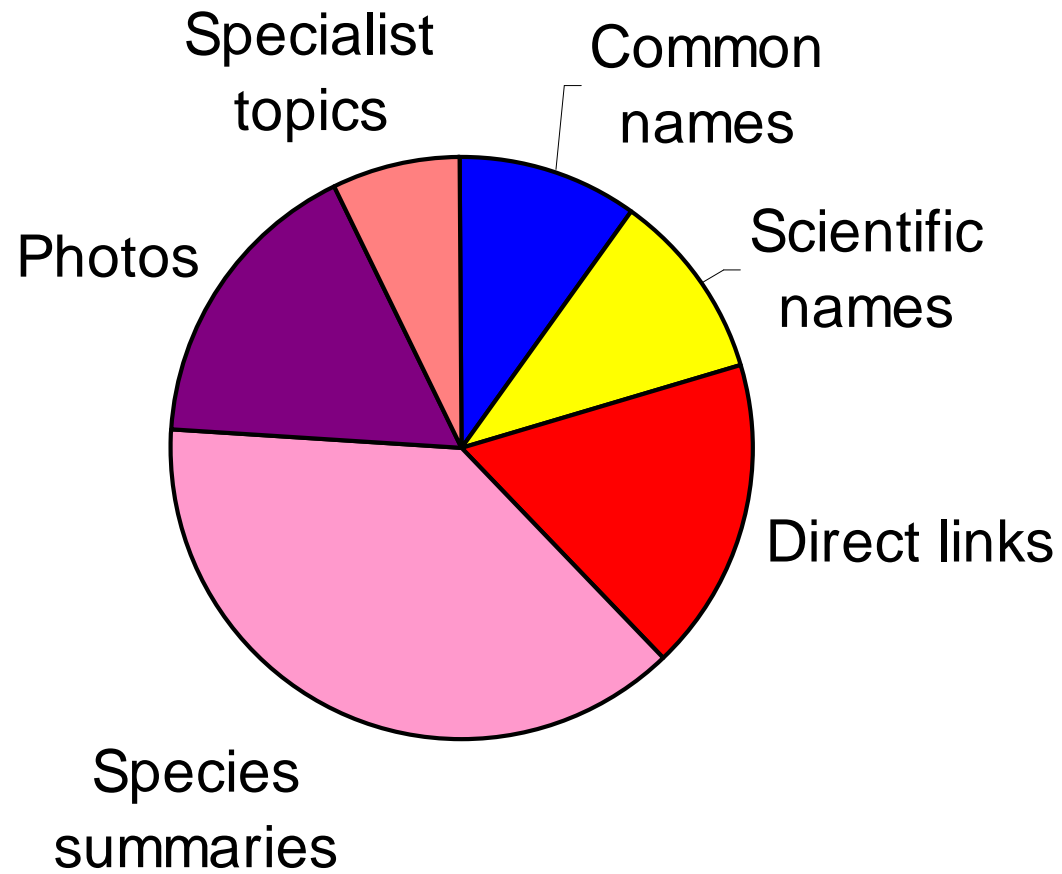
Keywords	Visits
fishbase	6,695
fish base	2,093
fish	756
anal	491
fishbase.org	460

# FishBase Users by Continent



Based on 2408 entries in the FishBase Guestbook , September 2005

# FishBase Web Usage by Topic in October 2008

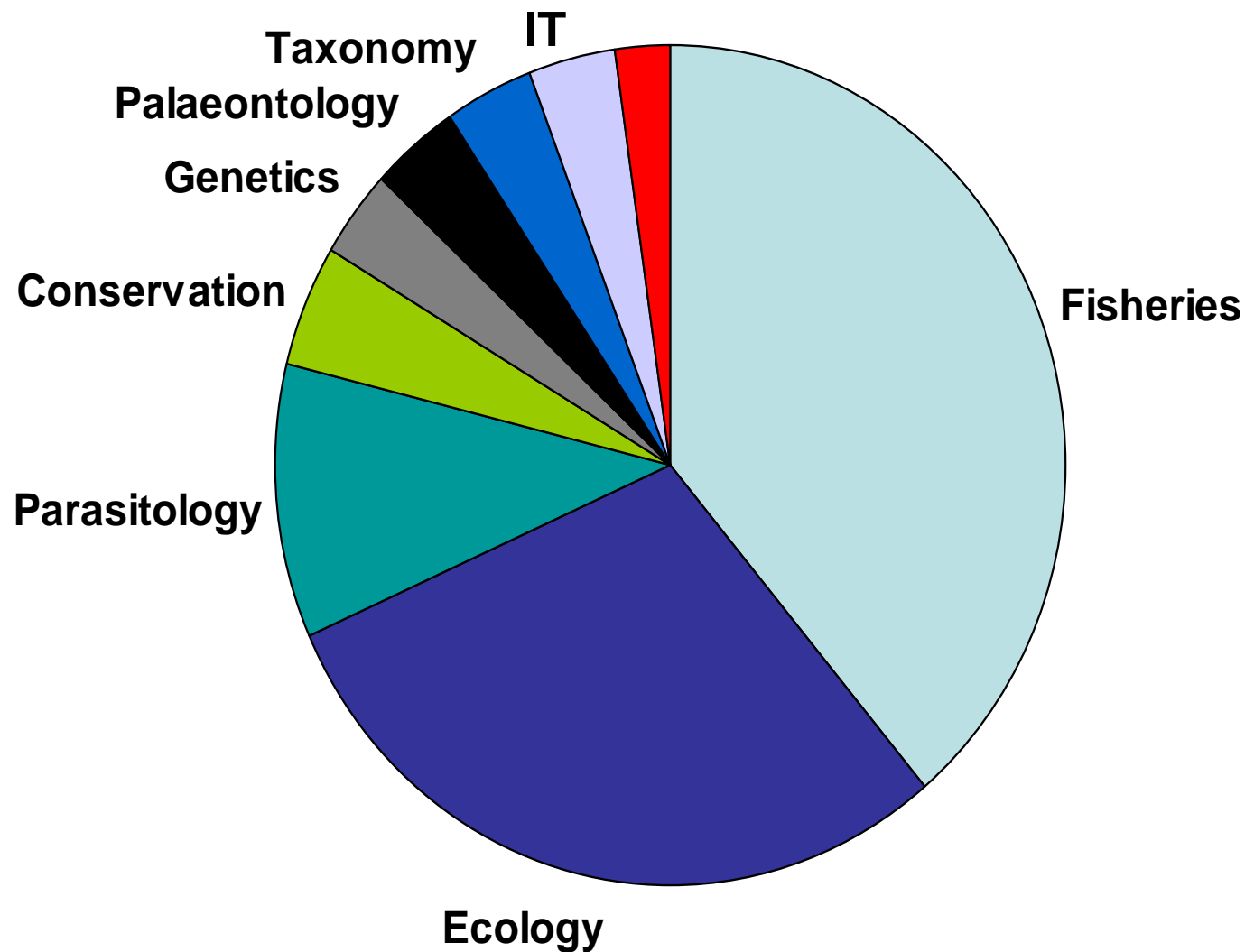


Based on hits by directory on Kiel server



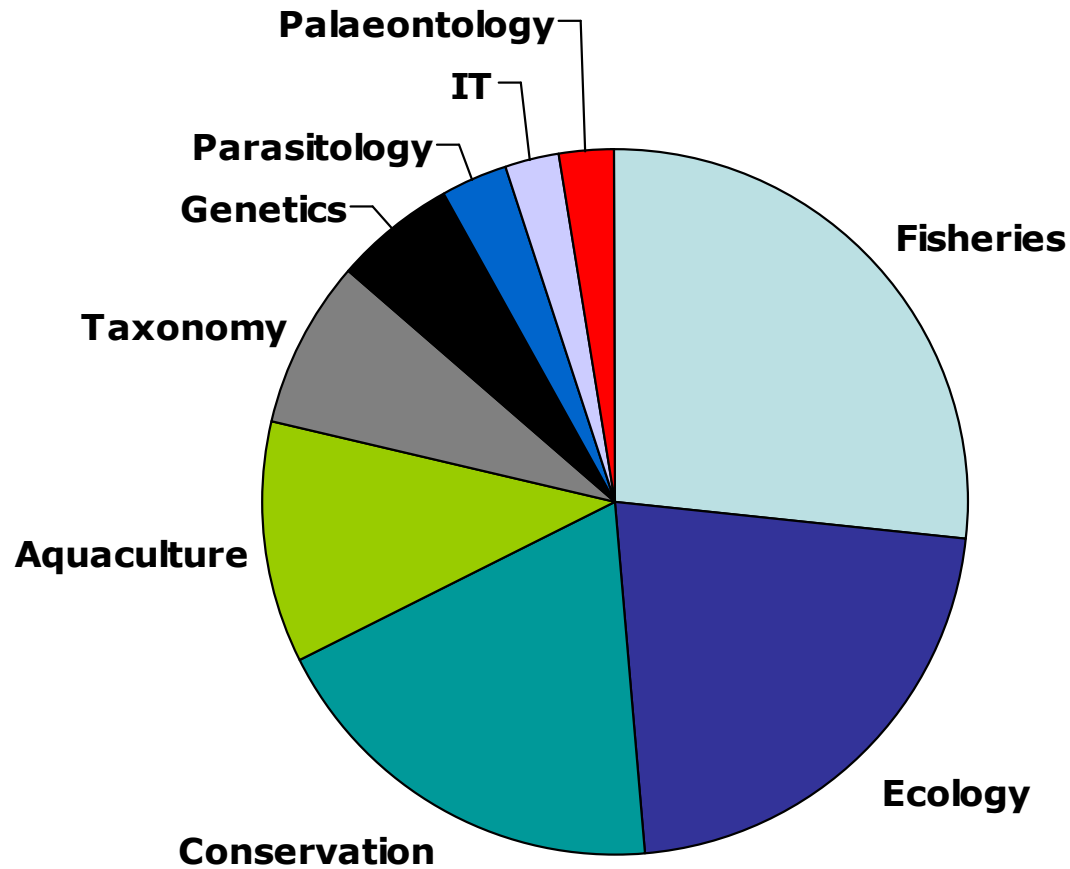
# Where is the Science?

85 ISI Citations, 3 in *Nature*, 2 in *Science* (June 2002)



June 2002

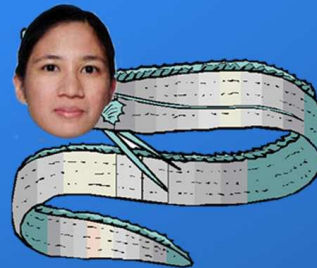
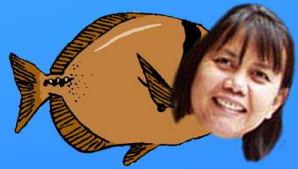
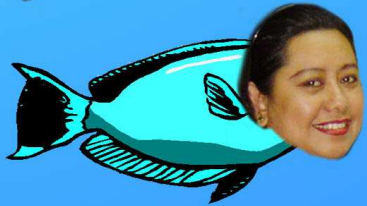
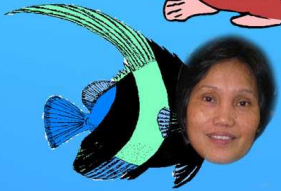
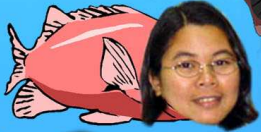
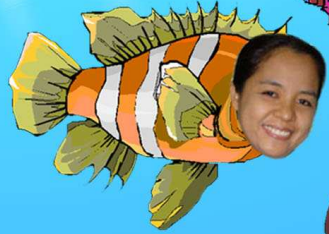
Google Scholar, April 2006:  
1610 citations, including 5 in Nature and 7  
in Science



# Who is FishBase?



# FishBase Team



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Nations



IFM

Fisheries Centre  
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[www.sealifebase.org](http://www.sealifebase.org)

# From FishBase to SeaLifeBase

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**SeaLifeBase** ( 81600 Species, 24000 Common names, 2300 Pictures, 11800 References, 90 Collaborators )  
(10/2008)



[Home](#)

## Common Name

contains   (e.g. turtle)

## Scientific Name

Genus    (e.g. Caretta)

Species   (e.g. caretta)

Scientific name  (e.g. Caretta caretta)

[A](#)[B](#)[C](#)[D](#)[E](#)[F](#)[G](#)[H](#)[I](#)[J](#)[K](#)[L](#)[M](#)[N](#)[O](#)[P](#)[Q](#)[R](#)[S](#)[T](#)[U](#)[V](#)[W](#)[X](#)[Y](#)[Z](#)

To search without Genus, change Genus option from 'is' to 'contains'.

*Caretta caretta* (Linnaeus, 1758)

**Family:** Cheloniidae ()

**Order:** Testudines (turtles and tortoises)

**Class:** Reptilia

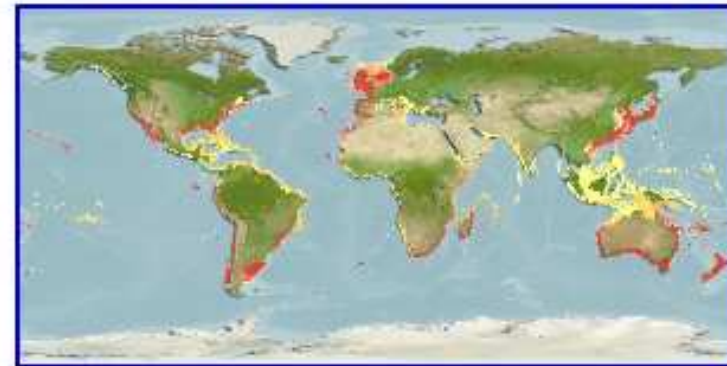
**SeaLifeBase name:** Loggerhead turtle

**Max. size:** 125 cm CL (male/unsexed; (Ref. [417](#)))

picture (Cacar ul.jpg) by Dr. Paddy Ryan



| [Native range](#) | [All suitable habitat](#) | [Year 2050](#) |



Note: This map was computer-generated and has not yet been reviewed by an expert.

[Caretta caretta](#) AquaMaps Data sources: [GBIF](#) [OBIS](#)

**Environment:** benthopelagic; oceanodromous (Ref. [1397](#)); marine; depth range 0 – 200 m

**Climate:** tropical; 12 – 20°C (Ref. [1397](#)); 61°N - 42°S, 180°W - 180°E

**Importance:** fisheries: commercial; price category: not marketed/unknown

**Resilience:**

**Vulnerability:** High to very high vulnerability (70.59), based on Lmax and K (Ref. [71543](#))

**Distribution:** Indo-Pacific, Western and Eastern Atlantic (Ref. [417](#)).



# The usual suspects



## BACKGROUND

The long-term goal of this project is to create and maintain a FishBase-like information system for all aquatic living organisms (marine and freshwater), ca. 300,000 spp. Of these, marine organism (about 200,000 spp) are the target of the current project phase. It will not provide yet another authority list of species, but rather provide, for each species included, the biological information necessary to conduct biodiversity and ecosystem studies, taking advantage of lists of species already available on paper and electronically, and using the scientific names they provide as 'hook' to organize biodiversity information.




[www.algaebase.org](http://www.algaebase.org)

Enter names above the level of genus:

Enter genus name:

Enter species name:

*Cephaleuros virescens* Robberg  
Reserve, Plettenberg Bay,  
Western Cape, South Africa; on  
surfaces of leaves on sheltered  
eastern side, with *Phycopeltis*  
spp.



## Cephaleuros virescens Kunze

>>

### Taxonomy

### References

[Submit Feedback](#)

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### Links

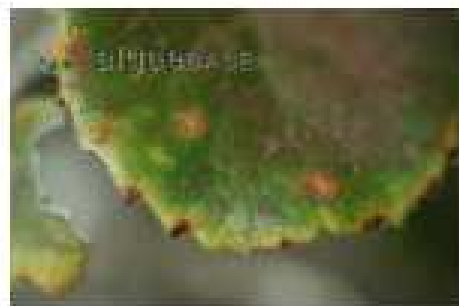
[Genbank](#)

[Index Nominum Algarum](#)

[Google](#)

### Pictures:

click on thumbnail for larger version.



Robberg Reserve, Plettenberg Bay,

## *Cephaleuros virescens* Kunze

### Publication details

*Cephaleuros virescens* Kunze 1827

### Origin of species name

Participle (Latin), becoming green (Stearn 1973).

### Synonym(s)

[Cephaleuros densus](#) Kunze ex E. M. Fries 1829

[Phycopeltis hawaiiensis](#) J.W. King 1954

### Habitat

This is a terrestrial species.

### Detailed distribution with sources

(as *Cephaleuros virescens* Kunze)

Europe: Belgium ([Sarma 1986](#)).

Atlantic Islands: Azores ([Sarma 1986](#)).

North America: Mexico ([Sarma 1986](#)), USA ([Sarma 1986](#)).

Central America: Costa Rica ([Sarma 1986](#)), Guatemala ([Sarma 1986](#)).

Caribbean Islands: Jamaica ([Sarma 1986](#)), Puerto Rico ([Sarma 1986](#)),

Trinidad & Tobago ([Sarma 1986](#)).

[www.speciesbase.org](http://www.speciesbase.org)



*( 73,100 species, including 29,800 fishes, 25,800 algae, 3,500 crustaceans, 3,500 mollusks, 2,500 cnidarians, 142 mammals, 299 birds, 76 reptiles and more )*

---

**Common Name**

e.g. Ocean sunfish

Search

---

**Scientific Name**

e.g. Mola mola

Search

---

SpeciesBase is a product of [FishBase](#), [SealifeBase](#) and [AlgaeBase](#).  
Developed and maintained by [Nina Garilao](#) since 07.03.08.



Name service provided by [Catalogue of Life](#)

---

***Gadus morhua*** Linnaeus, 1758

Animalia-Chordata-Actinopterygii-Gadiformes-Gadidae

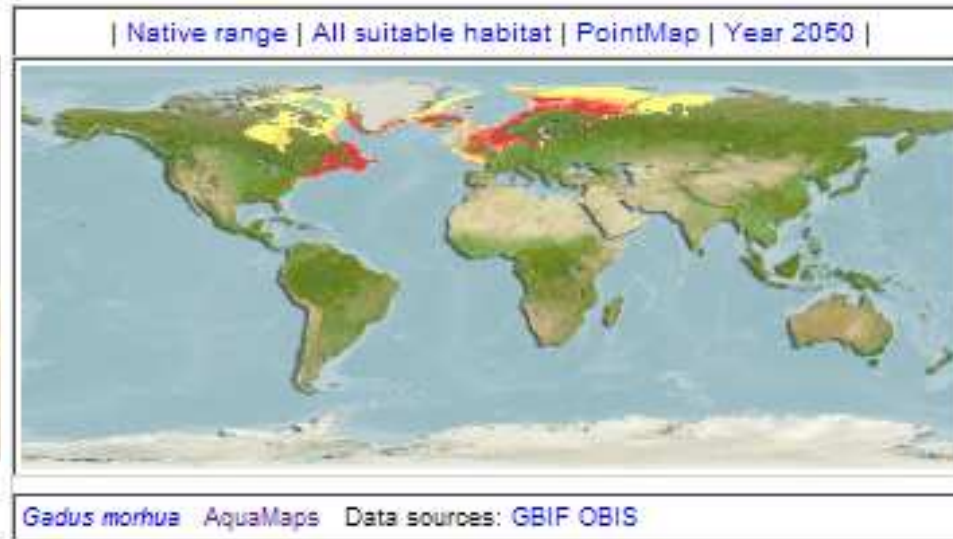


**FishBase presented through SpeciesBase**

Atlantic cod



Picture by Nilsson, K.



### Distribution

Northwest to Northeast Atlantic: Cape Hatteras to Ungava Bay along the North American coast; east and west coast of Greenland; around Iceland; coasts of Europe from the Bay of Biscay to the Barents Sea, including the region around Bear Island.

### Environment

benthopelagic; oceanodromous; brackish; marine; depth range 0-600 m

### Climate

temperate; 0-20 °C; 80 N-35 N, 95 W-61 E

### Maximum size

200 cm TL; max. published weight: 96.0 kg; max. reported age: 25 years

## Morphology

Dorsal soft rays (total): (44-55); Anal soft rays: (33-45); Vertebrae: (51-55); Light lateral line, curved above pectorals. Predorsal distance less than 1/3 of TL. Color varies from brownish to greenish or gray dorsally and on upper sides, becoming pale ventrally. Peritoneum silvery.

## Biology

Epibenthic-pelagic (Ref. 58426). This species is widely distributed in a variety of habitats, from the shoreline down to the continental shelf. Cod form schools during the day. Cod are omnivorous; they feed at dawn or dusk on invertebrates and fish, including young cod. Cod spawn once a year, in batches (Ref. 51846). They are marketed fresh, dried or salted, smoked and frozen; they are eaten steamed, fried, broiled, boiled, microwaved and baked (Ref. 9988). The most important stocks are the Norwegian Arctic stock in the Barents Sea and the Icelandic stock. The populations around Greenland and Newfoundland have declined dramatically (Ref. 35388). Over 12 nucleotide substitutions in the 307 base pair region of the mitochondrial cytochrome b gene differentiate this species from *Gadus ogac* (Ref. 40214).

## Trophic Level

4.4

## Resilience

Medium

## IUCN Red List Status

Vulnerable

## More Information

[Countries](#) | [FAO areas](#) | [Ecosystems](#) | [Synonyms](#) | [Common Names](#) | [References](#) | [Collaborators](#)  
[CoL Synonyms](#) | [CoL Common names](#) | [CoL References](#)

## More Information in FishBase

## Internet Sources

[BOLDSystems](#) | [CISTI](#) | [EOL](#) | [FAO Species](#) | [GBIF](#) | [Google](#) | [Images](#) | [iSpecies](#) | [PubMed](#) | [Scholar](#) | [Scirus](#) | [Tree of Life](#) | [Wikipedia](#) | [Zoological Record](#)

Name service provided by [Catalogue of Life](#)

---

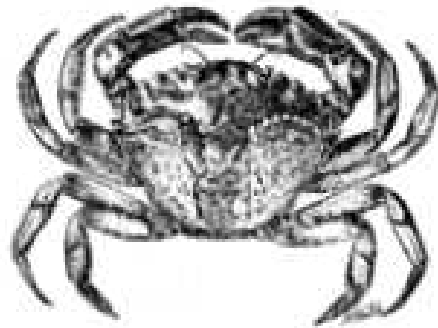
*Carcinus maenas* (Linnaeus, 1758)

Animalia-Arthropoda-Malacostraca-Decapoda-Portunidae



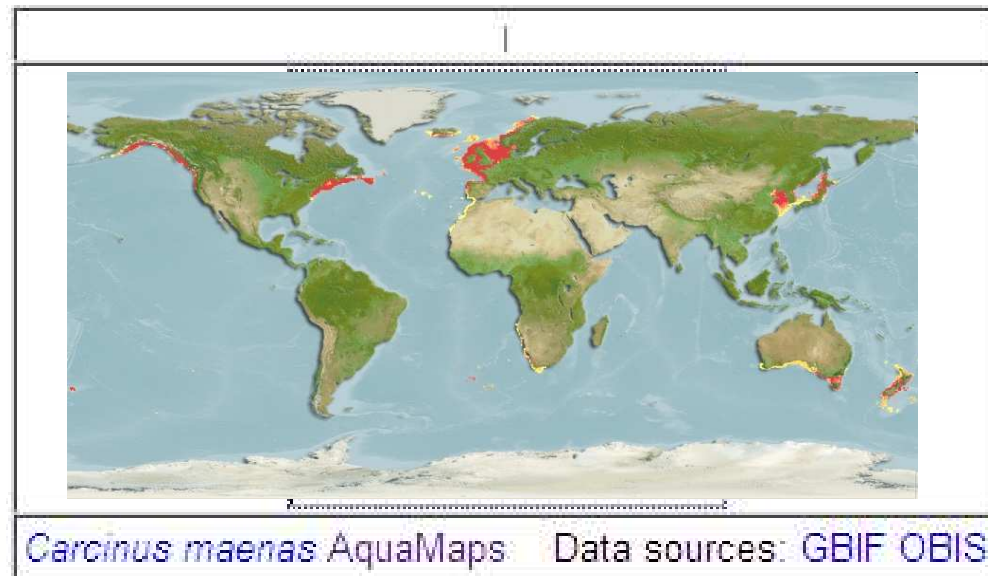
SeaLifeBase presented through SpeciesBase

Green crab



FAO

Picture by FAO



### Distribution

Atlantic and southwest Pacific: from Mauritania to the Atlantic coast of Europe and east coast of America, probably introduced in southeast Australia.

### Environment

demersal; brackish; marine

### Climate

subtropical

### Maximum size

6 cm CL;

Name service provided by [Catalogue of Life](#)

---

*Fucus vesiculosus* Linnaeus

~~Chromista-Ochrophyta-Phaeophyceae-Fucales-Fucaceae~~



**AlgaeBase presented through SpeciesBase**



Picture by M.D. Guiry © M.D. Guiry



**Fucus vesiculosus**  
Global Biodiversity Information Facility Network

#### Distribution

Arctic; Ireland; Europe; Atlantic Islands; North America; Caribbean Islands; South America; Africa

#### Environment

marine;

#### More Information

[Countries](#) | [FAO Areas](#) | [Ecosystems](#) | [Synonyms](#) | [Common Names](#) | [References](#) | [Collaborators](#)  
[CoL Synonyms](#) | [CoL Common names](#) | [CoL References](#)

#### More Information in [AlgaeBase](#)

#### Internet Sources

[BOLDSystems](#) | [CISTI](#) | [EOL](#) | [GBIF](#) | [Google](#) | [Images](#) | [iSpecies](#) | [PubMed](#) | [Scholar](#) | [Scirus](#) | [Tree of Life](#) | [Wikipedia](#) | [Zoological Record](#)

# Terrestrial species still looking for partners

Name service provided by [Catalogue of Life](#)

*Alces alces* (Linnaeus, 1758)

~~Animalia-Chordata-Mammalia-Artiodactyla-Cervidae~~

[????Base](#) presented through SpeciesBase

Moose



Google Image (not verified)

## Distribution

Wide-ranging in the northern hemisphere. North America: throughout most of Canada, western and central Alaska, New England, upstate New York, the upper Rocky Mountains, northeastern Minnesota, the upper Peninsula of Michigan and Isle Royale in Lake Superior. Isolated populations have been verified as far south as the mountains of Utah and Colorado. Europe: throughout Norway, Sweden, and Finland; also known from Estonia, Latvia, and Lithuania. Small populations exist in Belarus and Poland. Asia: widespread through the Russian Federation.

## Environment

land

## Climate

temperate/subarctic

## Maximum size

233 cm; max. published weight: 820.0 kg;

## Biology

Inhabits boreal and mixed deciduous forests. Diurnal. Solitary in nature but a calf will stay with the mother until the next young is born. Males are polygamous. Mating occurs in the autumn months and involves both sexes calling each other. The mating ritual may involve a violent fight between two males eyeing the same female. Females have an eight month gestation period and usually produce a single calf. Predators of moose include packs of wolves, Siberian tigers and bears.

## IUCN Red List Status

Vulnerable

[www.aquamaps.org](http://www.aquamaps.org)



# What are AquaMaps

- Computer-generated distribution maps
- Based on environmental preference of species and known occurrences
- For eventually all species on Earth



**AquaMaps (10/2008):**

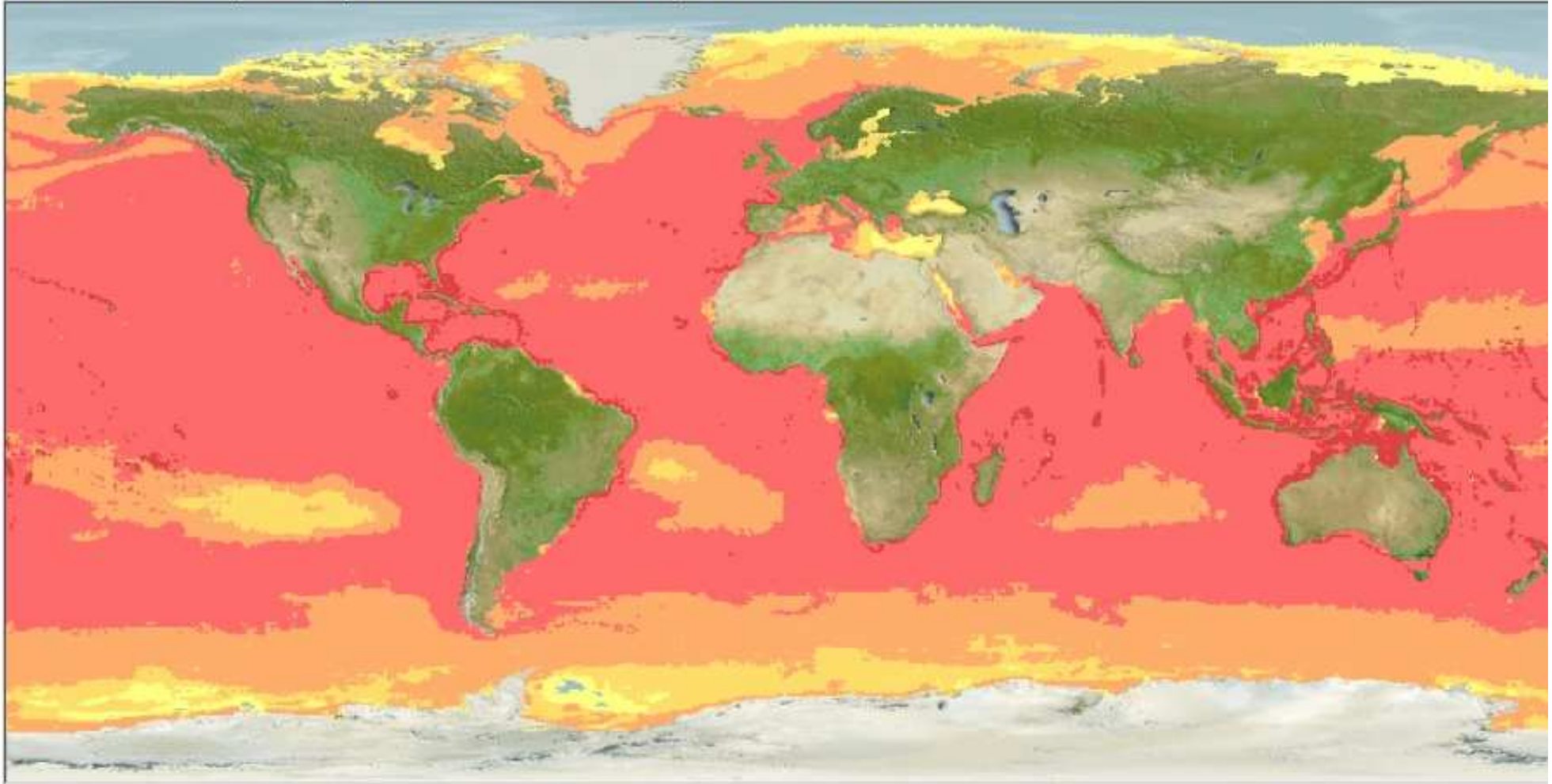
Standardized distribution maps for currently 9,000 species of fishes, marine mammals and invertebrates.

AquaMaps is a joint project of [FishBase](#) and [SeaLifeBase](#).

[Home](#) | [About AquaMaps](#) | [Tools](#) | [Environmental Data](#) | [Services](#)

Marine Biodiversity Map: click on the map to obtain local species list for that area.

All  Sharks & rays  Bony fish  Invertebrates  Deep-sea  Marine mammals



Data sources: [GBIF](#) [OBIS](#)

## Common species in this area







[Close window](#)[Advanced users>>](#)[Page down](#)

Records 1 - 10 of 272

[Next page»](#)Probability > [Refresh](#)Species:  Native Potential invasives All

All

Sort by:  Popular Species Common name

#	Species	Common name	Picture	Map
1	<i>Salmo salar</i>	Atlantic salmon	 <p>by Windsor Nature Discovery</p>	
2	<i>Dicentrarchus labrax</i>	European seabass	 <p>by Crocetta, F.</p>	
3	<i>Gadus morhua</i>	Atlantic cod	 <p>by Graasmann, A.</p>	





**AquaMaps (10/2008):**

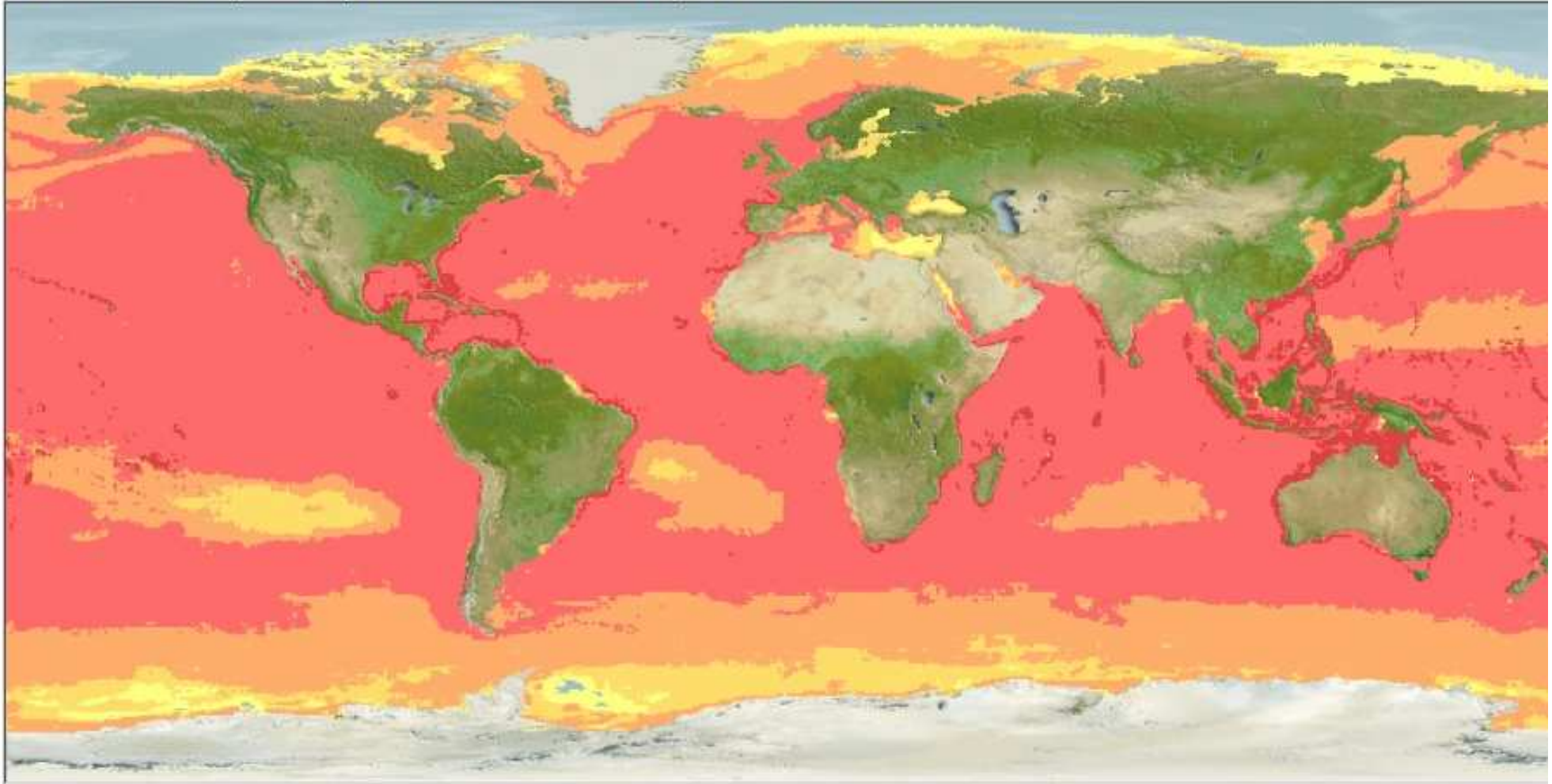
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Marine Biodiversity Map: click on the map to obtain local species list for that area.

All  Sharks & rays  Bony fish  Invertebrates  Deep-sea  Marine mammals



Data sources: [GBIF](#) [OBIS](#)

### Common Name

contains   (e.g. blue whale)

### Scientific Name

Genus is   (e.g. Balaenoptera)

Species contains  (e.g. musculus)

To search without Genus, change Genus option from 'is' to 'contains'.

### Biodiversity Maps

Type Species richness map

Group  n = 68

### Checklists by Large Marine Ecosystems

LME  n = 66

### Checklists by Country / Islands

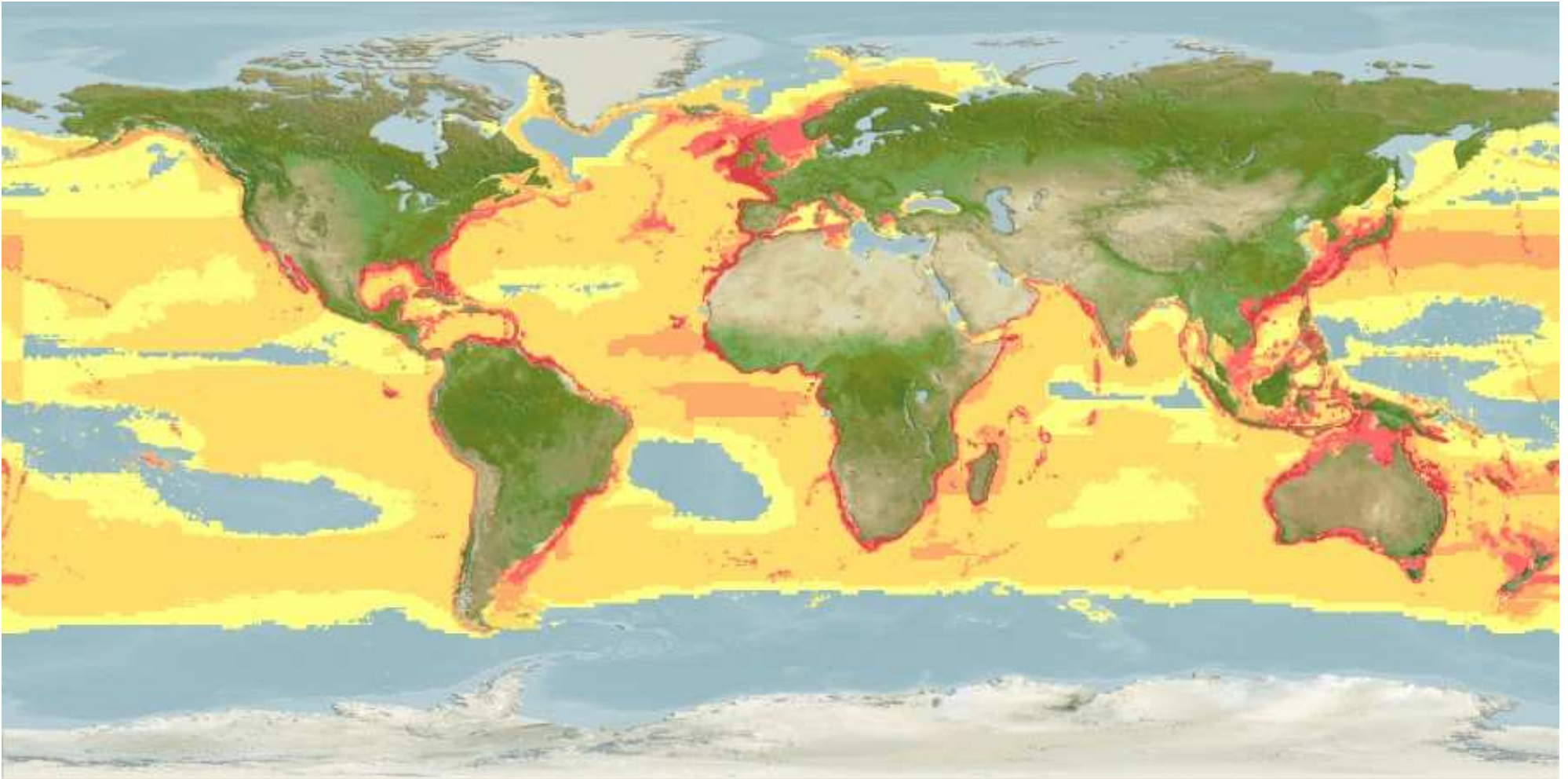
Country  n = 240

### Tools

- Advanced Search
- Biodiversity maps
- Latitudinal transects
- Longitudinal transects
- Climate change maps
- Seasonal maps\*
- Before/After maps\*
- Expert reviewed maps
- MPA planning tool
- Web service
- Freshwater AquaMaps
- Freshwater checklists
- Invasive species checklists

Note: Tools with ( \* ) display point maps.

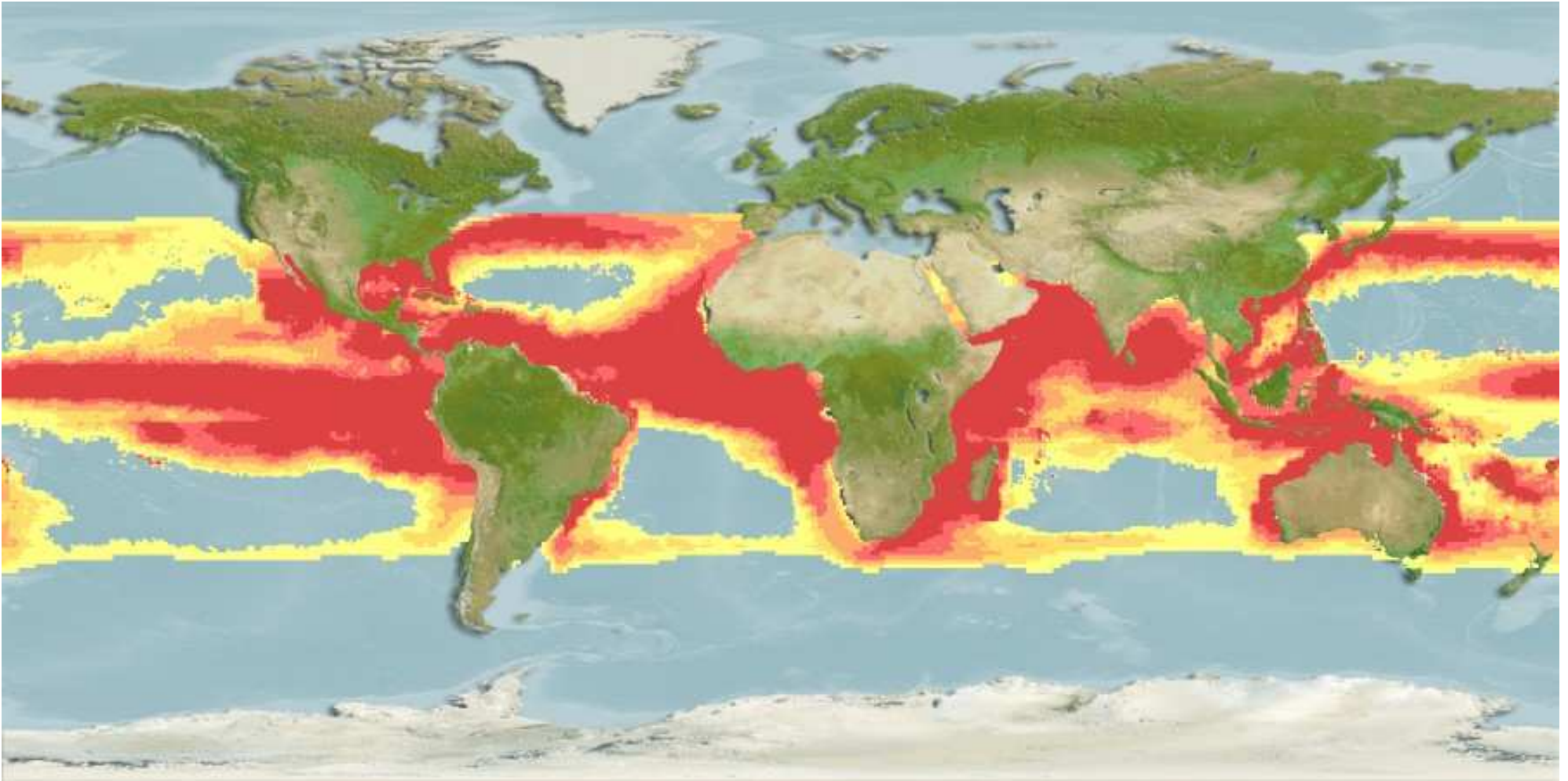
# Examples from AquaMaps: No Sharks in Antarctica





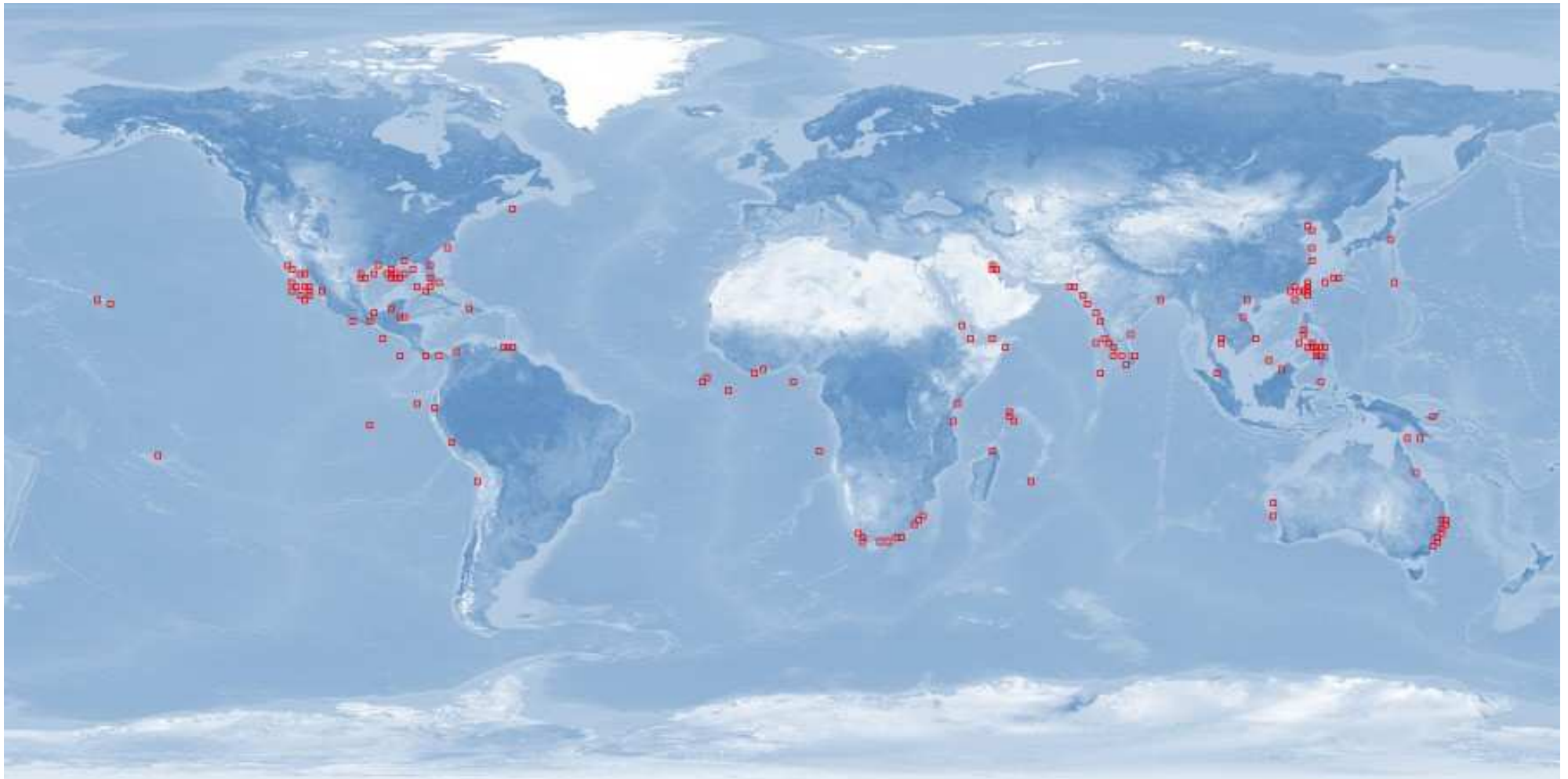
# Examples from AquaMaps

## Whale shark (cosmopolitan)



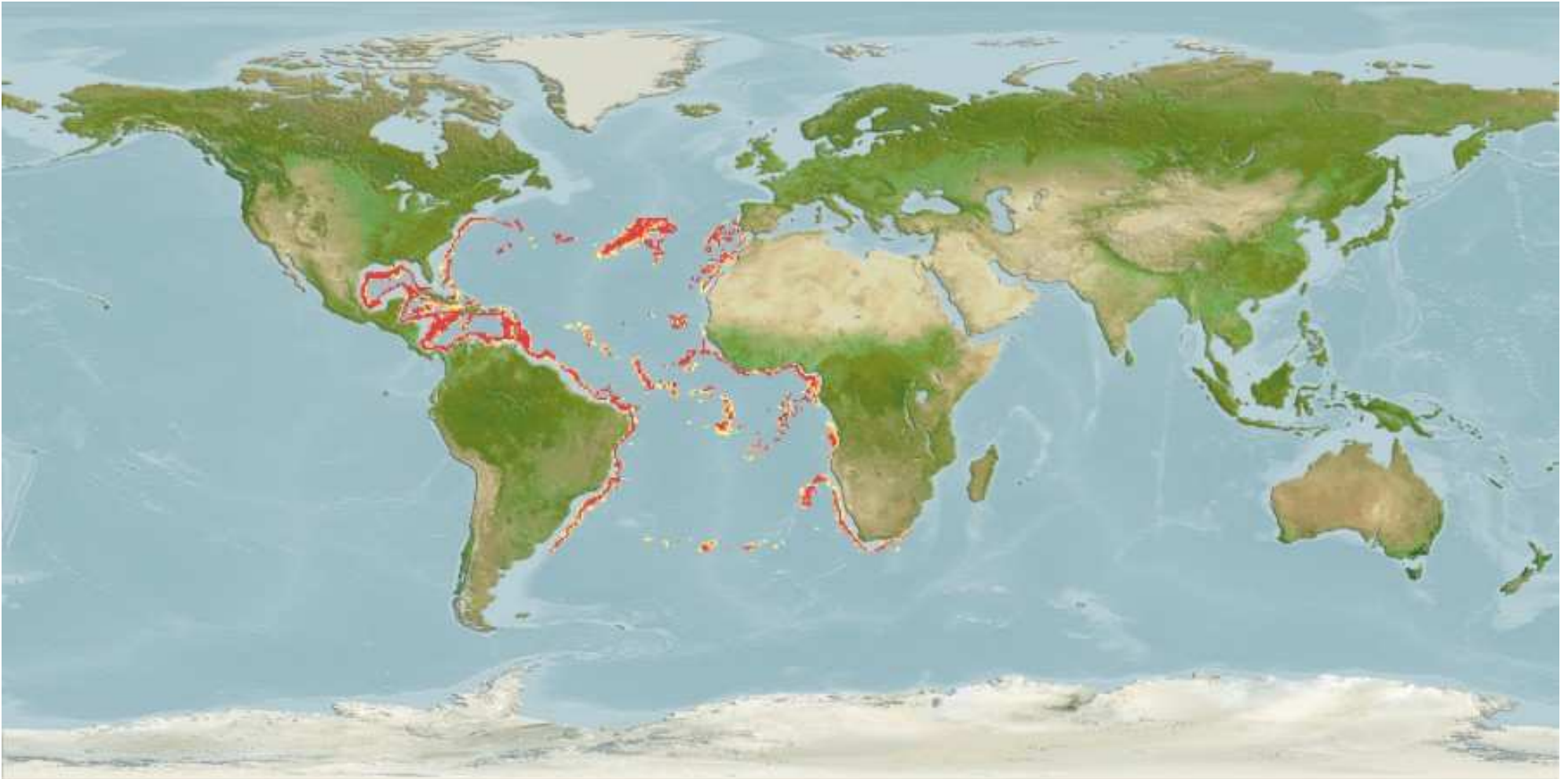
# Examples from AquaMaps

## Whale shark (cosmopolitan)



# Examples from AquaMaps

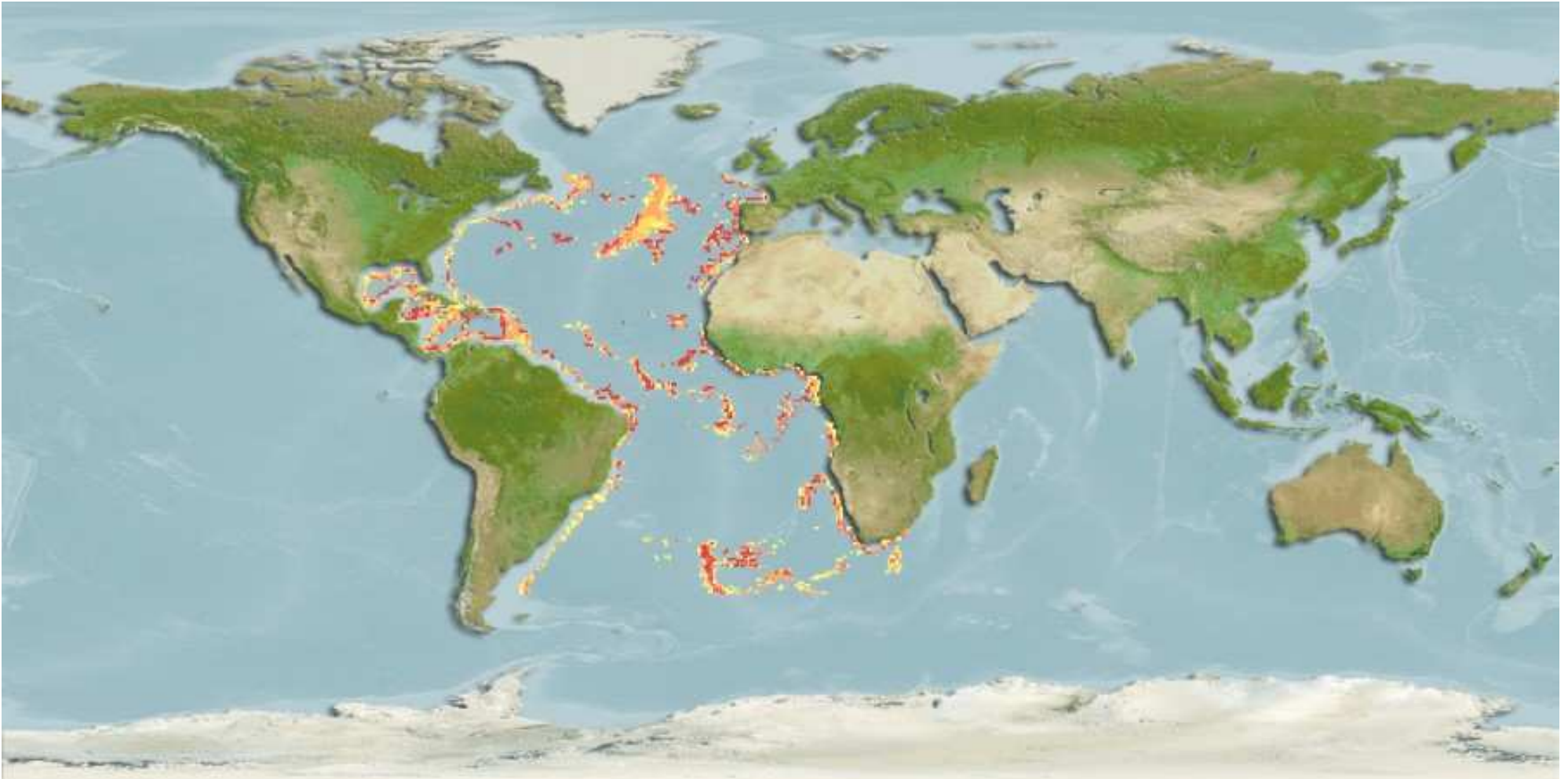
## Blackfin spiderfish (continental shelves)



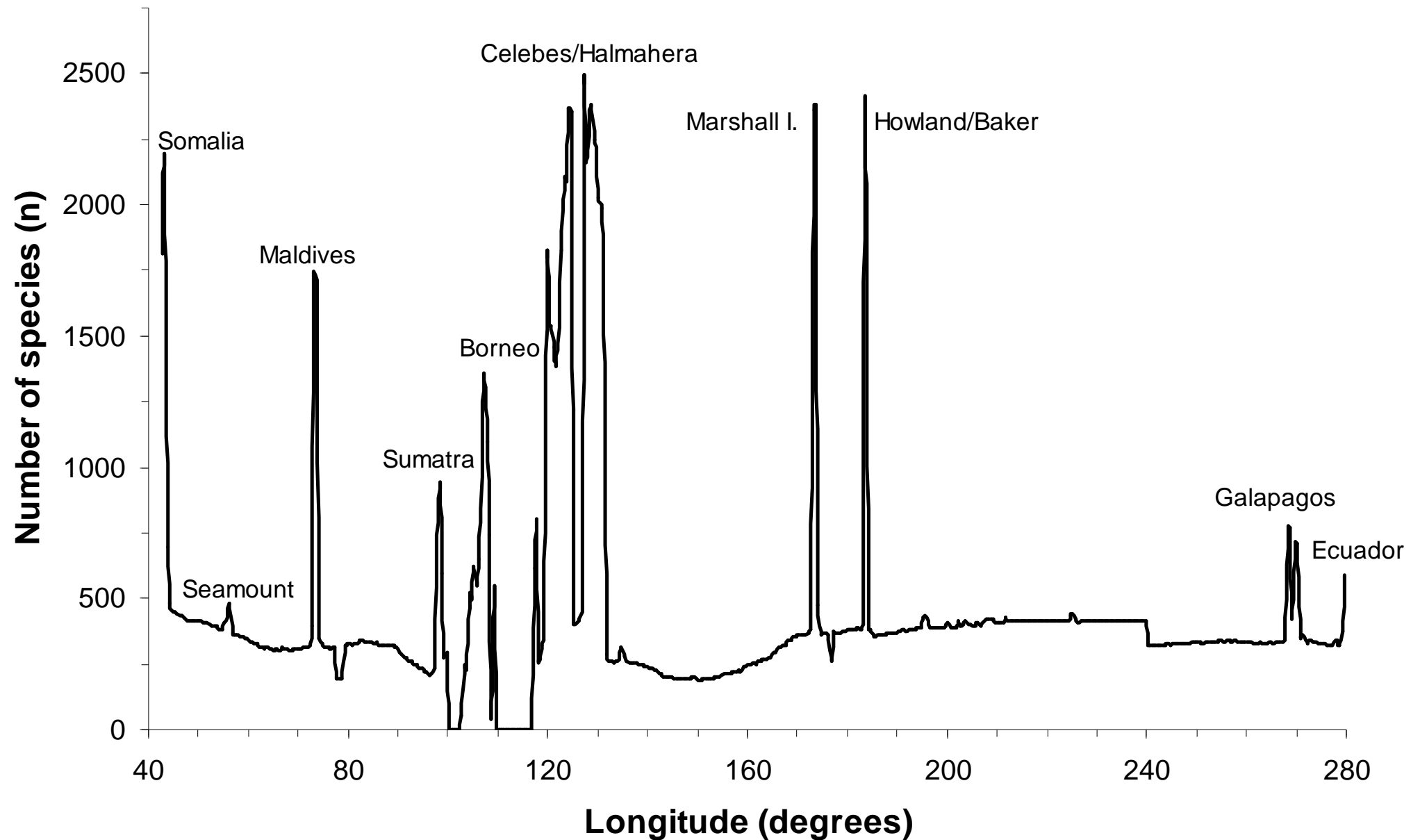


# Examples from AquaMaps

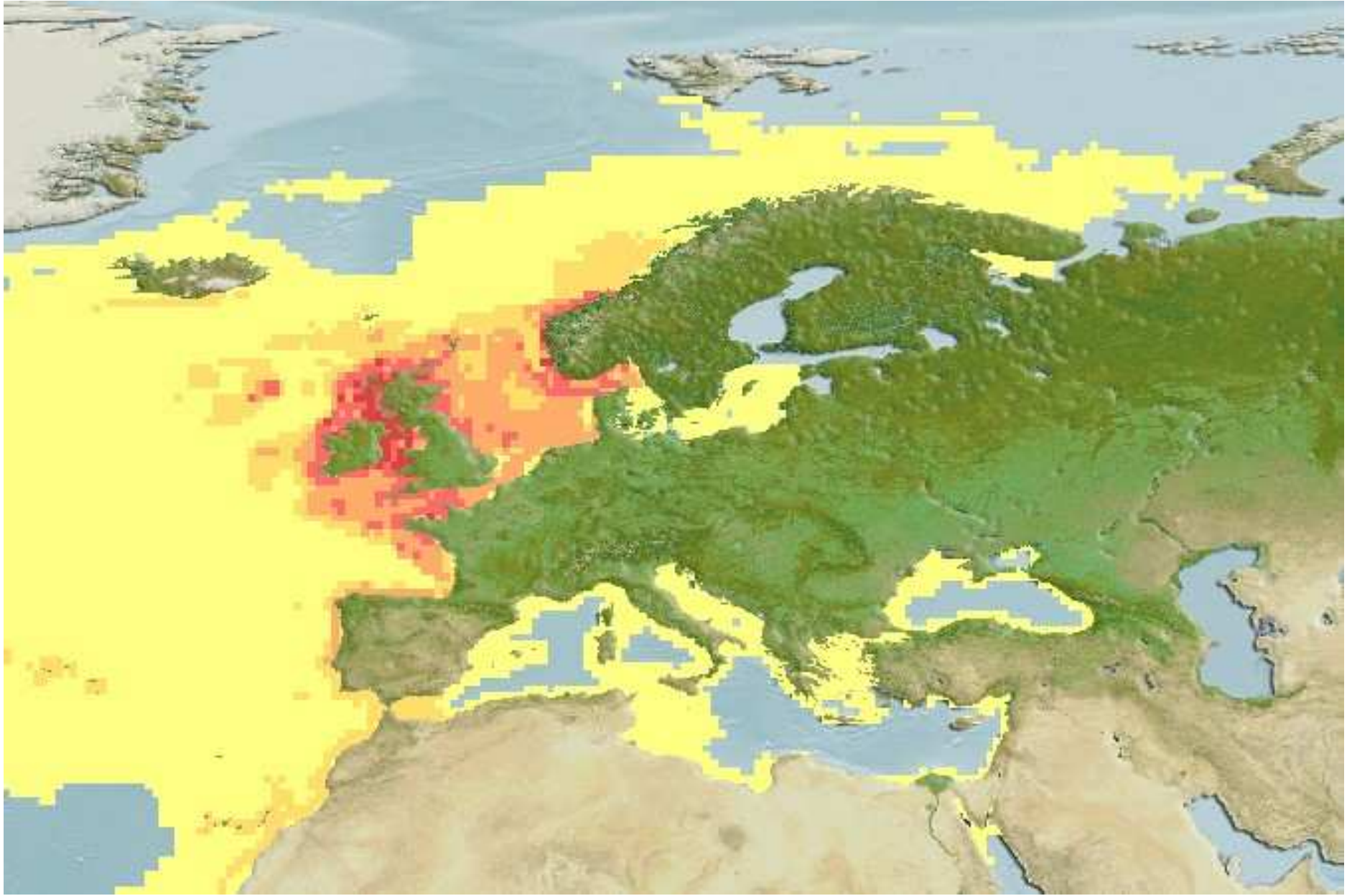
## Blackfin spiderfish (preliminary 2050)



# Tools: Equatorial Species Richness Transect across the Indo-Pacific



# Tools : Where to Place an MPA





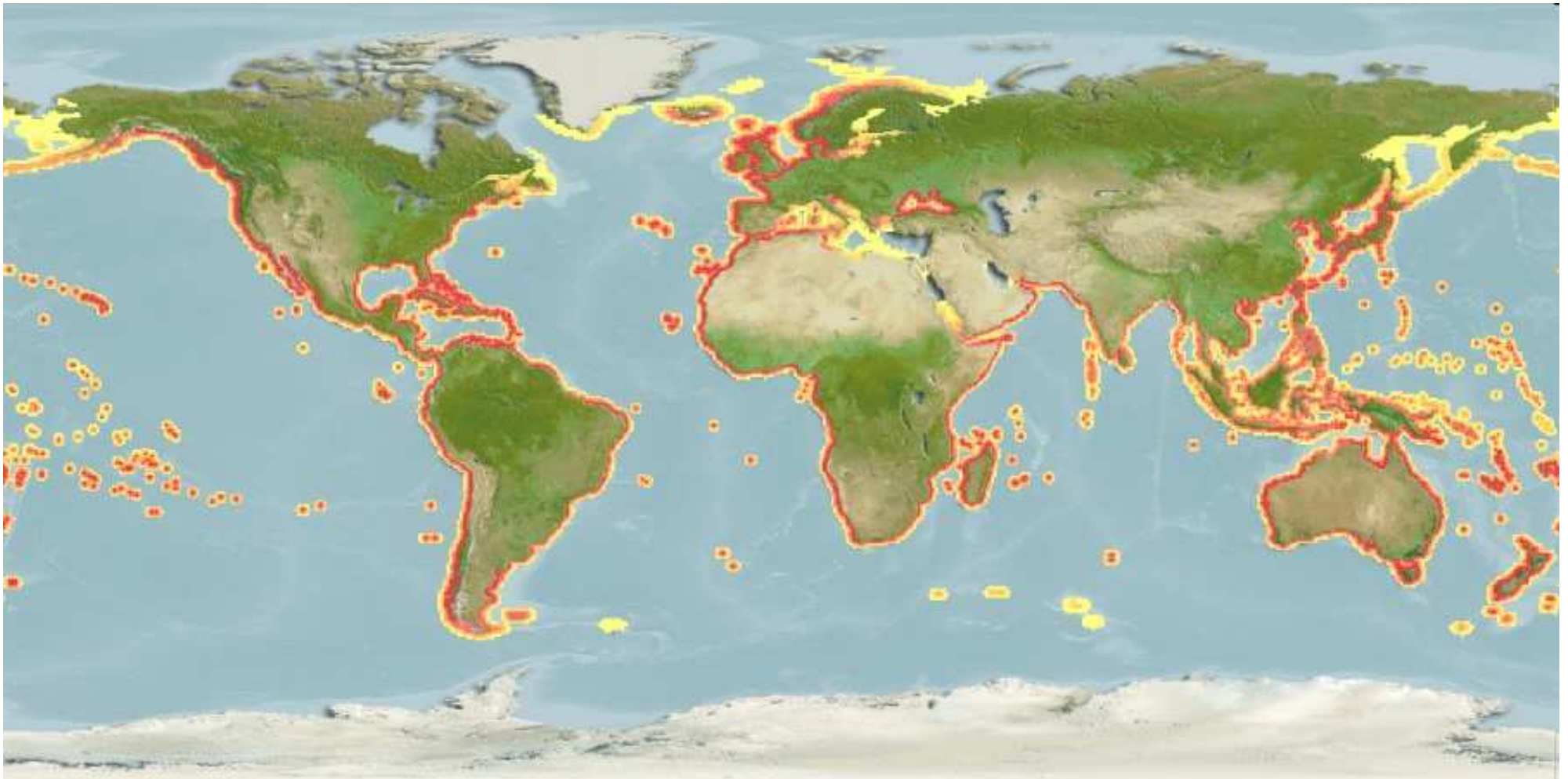
# Tools

*Mnemiopsis leidyi* (invasive Black Sea)



# Tools

*Mnemiopsis leidyi* (invasive Black Sea)





**Freshwater Species with AquaMaps** n = 682 [Exclude map in list](#)

Click on the map or the 'View Map' link to see map and data used in generating the distribution map.

Click on the 'Scientific Name' to see species profile.

[Next 10](#)

[View all](#)

[<<Back](#)

[Search AquaMaps](#)

[FishBase](#)

1. [Abramites hypselonotus](#)

Marbled headstander



2. [Acarichthys heckelii](#)

Threadfin acara



3. [Acaronia nassa](#)

Bigeye cichlid



# Summary

## Relevance to Research Priorities

- The identified research priorities are realistic
- Building blocks are available in Europe
- It can be done
- Let's do it

# Thank You

[www.fishbase.org](http://www.fishbase.org)

[www.sealifebase.org](http://www.sealifebase.org)

[www.algaebase.org](http://www.algaebase.org)

[www.speciesbase.org](http://www.speciesbase.org)

[www.aquamaps.org](http://www.aquamaps.org)