

# Improved information on alien and invasive species

*Tim Hirsch, Deputy Director*

# A MAJOR TOPIC FOR GBIF-ENABLED RESEARCH

**Global bans on bird trade needed to stop invasions**

Study shows that regional trade bans limits global avian invasion risk—but bans need to be global for full effect ... Wildlife trade can lead to species going extinct in their native ranges, but also t...

Published 5 October 2018

**Data use**



**From cultivation to invasion - naturalization of garden ornamentals**

Study of German parks and gardens shows climatic suitability as main factor behind naturalization and suggests 45 species to become naturalized in the future ... Not only having important aesthetic val...

Published 13 September 2018

**Data use**



**Noisy neighbours: acoustic interference among invasive amphibians**

Study maps invasive amphibians in Brazil and shows acoustic overlaps in mating calls between native and invasive species ... Alien invasive species can disrupt ecosystems directly by outcompeting nativ...

Published 10 September 2018

**Data use**



**Assessing invasive aquatic plants of South America**

Invasive plants study shows improvement of GBIF-mediated data quality by addition of manually sourced literature records ... GBIF.org is a unique source of primary distribution data used in a multitude...

Published 5 September 2018

**Data use**



486/3505 (14%) of research papers using GBIF-mediated data address invasive alien species

# TASK GROUP ON ALIEN AND INVASIVE SPECIES



## Data fitness for use in research on alien and invasive species

Final task group report  
November 2016



Melodie McGeoch  
Quentin Groom  
Shyama Pagad  
Varos G. Petrosyan  
Gregory M. Ruiz  
John Wilson

“Sustainable, reliable, timely, and accessible data on alien and invasive species is essential to the long-term management of this key threat to biodiversity”



# SHARING OF INVASIVE SPECIES CHECKLISTS IN GBIF.ORG

NEWS | 23 JANUARY 2018

## National alien species lists published through GBIF

*First 23 validated checklists from the Global Register of Introduced and Invasive Species highlighted in paper, signalling major step in delivering information to support national action against biological invasions*



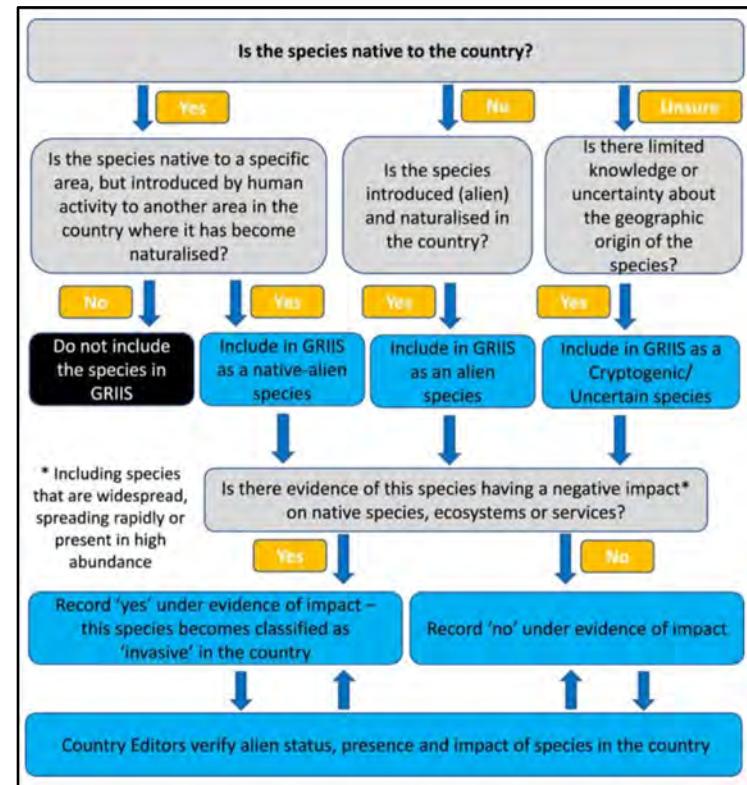
Data Descriptor **OPEN** Published: 23 January 2018

## Introducing the Global Register of Introduced and Invasive Species

Shyama Pagad ✉, Piero Genovesi, Lucilla Carnevali, Dmitry Schigel & Melodie A. McGeoch ✉

Scientific Data 5, Article number: 170202 (2018) [Download Citation](#) ↴

<https://doi.org/10.1038/sdata.2017.202>



# 85 COUNTRY AND ISLAND CHECKLISTS

SEARCH DATASETS | 85 RESULTS

SAMPLING EVENT    METADATA

**Global Register of Introduced and Invasive Species- United Kingdom** Checklist dataset

The Global Register of Introduced and Invasive Species (GRILIS) presents validated and verified checklists (inventories) of introduced (alien) and invasive alien species at the country, territory, and ...

Published by Invasive Species Specialist Group ISSG

2,848 records

**Global Register of Introduced and Invasive Species- Denmark** Checklist dataset

The Global Register of Introduced and Invasive Species (GRILIS) presents validated and verified checklists (inventories) of introduced (alien) and invasive alien species at the country, territory, and ...

Published by Invasive Species Specialist Group ISSG

2,462 records

**Global Register of Introduced and Invasive Species- South Africa** Checklist dataset

The Global Register of Introduced and Invasive Species (GRILIS) presents validated and verified checklists (inventories) of introduced (alien) and invasive alien species at the country level. Phase 1 o...

Published by Invasive Species Specialist Group ISSG

2,107 records | 1 citation

**Global Register of Introduced and Invasive Species- Italy** Checklist dataset

The Global Register of Introduced and Invasive Species (GRILIS) presents validated and verified checklists (inventories) of introduced (alien) and invasive alien species at the country, territory, and ...

Published by Invasive Species Specialist Group ISSG

1,761 records

... and more to come soon!

# LISTS COVER COUNTRIES, ISLANDS, TERRITORIES

CHECKLIST DATASET | REGISTERED 12 OCTOBER 2018

## Global Register of Introduced and Invasive Species- United Kingdom

Published by [Invasive Species Specialist Group ISSG](#)

✉ Roy Helen • Stephanie Rorke • Lian Jenna Wong • Shyama Pagad

CHECKLIST DATASET | REGISTERED 27 MARCH 2018

## Global Register of Introduced and Invasive Species- Bonaire\_Netherlands

Published by [Invasive Species Specialist Group ISSG](#)

✉ Adolphe Debrot • John de Freitas • Sabine Engel • Gerard van Buurt • Caren Eckrich • Paulo Bertuol • Kalli De Meyer • Lian Jenna Wong • Shyama Pagad

CHECKLIST DATASET | REGISTERED 28 SEPTEMBER 2017

## Global Register of Introduced and Invasive Species- South Africa

Published by [Invasive Species Specialist Group ISSG](#)

✉ Tammy Robinson • Philip Ivey • Leslie Powrie • Pieter Winter • Lian Jenna Wong • Shyama Pagad

CHECKLIST DATASET | REGISTERED 15 OCTOBER 2018

## Global Register of Introduced and Invasive Species- Norway- Svalbard

Published by [Invasive Species Specialist Group ISSG](#)

✉ Olga Hilmo • Lisbeth Gederaas • Lian Jenna Wong • Shyama Pagad

[DATASET](#) [TAXONOMY](#) [PROJECT](#) [METRICS](#)  [DOWNLOAD](#)  [HOME PAGE](#)

15 RECORDS

Phase 1 of the project focused on developing validated and verified checklists of countries that are Party to the Convention on Biological Diversity (CBD). Phase 2 which is on-going, aims to achieve global coverage including non-party countries and all overseas territories of countries e.g. Netherlands, France and United Kingdom. Species belonging to all Kingdoms are covered as well as occurring in all Environment/systems. Country/ Territory/ Island checklists are reviewed and verified by netwo... [More](#)

Metadata last modified: 15 October 2018

Hosted by: [Atlas of Living Australia](#)

License: CC BY 4.0

[How to cite](#) [DOI](#) 10.15468/eicmke

15

Accepted names

0

Synonyms

100%

Overlap with GBIF Backbone

95%

Overlap with Catalogue of Life

# CHECKLISTS LINKED TO SPECIES PAGES

SPECIES | ACCEPTED

## *Lantana camara L.*

Published in: Sp. pl. 2:627. 1753, nom. cons. source: Catalogue of Life

Common lantana In English

OVERVIEW

METRICS

REFERENCE TAXON

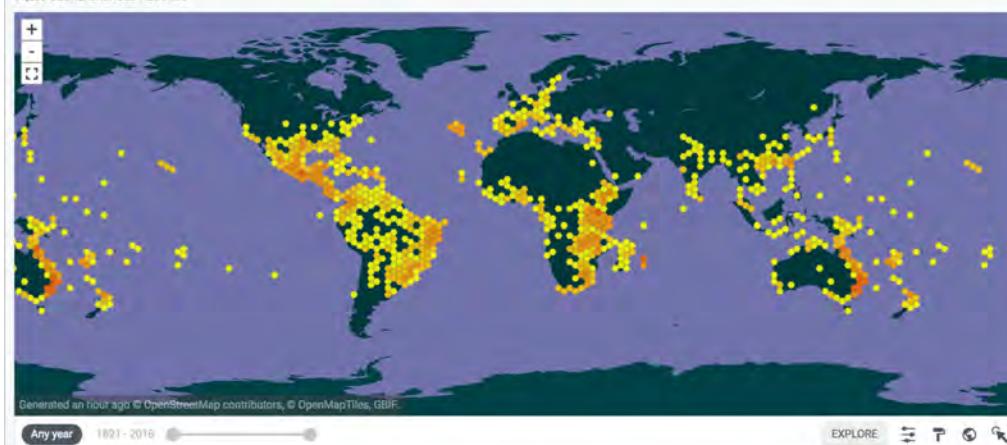
41,405 OCCURRENCES

11 INFRASPECIES

3,292 OCCURRENCES WITH IMAGES



34,283 GEOREFERENCED RECORDS



<https://www.gbif.org/species/2925303>

# CHECKLISTS LINKED TO SPECIES PAGES

SPECIES | ACCEPTED

## *Lantana camara L.*

Published in: Sp. pl. 2:627. 1753, nom. cons. source: Catalogue of Life

Common lantana In English

RECORDED AS INVASIVE IN 51 COUNTRIES AND ISLANDS

Recorded as invasive in

According to

Occurrences in GBIF

South Africa

[Global Register of Introduced and Invasive Species- South Africa](#)

1,343 occurrences

Italy

[Global Register of Introduced and Invasive Species- Italy](#)

25 occurrences

Ecuador

[Global Register of Introduced and Invasive Species- Ecuador -Galapagos Islands](#)

Unknown

Brazil

[Global Register of Introduced and Invasive Species- Brazil](#)

4,336 occurrences

Seychelles

[Global Register of Introduced and Invasive Species- Seychelles](#)

14 occurrences

Cyprus

[Global Register of Introduced and Invasive Species- Cyprus](#)

5 occurrences

Egypt

[Global Register of Introduced and Invasive Species- Egypt](#)

5 occurrences

Colombia

[Global Register of Introduced and Invasive Species- Colombia](#)

510 occurrences

Algeria

[Global Register of Introduced and Invasive Species- Algeria](#)

1 occurrence

# TRACKING THE AMERICAN MINK

***Neovison vison* (Schreber, 1777)**

Published in: Die Säugetiere vol.3 19 p.pl. 127.B [1777]; see aksi text, 3(26):463 [1777] source: Catalogue of Life

American Mink in English   Least Concern IUCN 2016   Basionym: *Putorius vison* (Schreber, 1777)

OVERVIEW   METRICS   REFERENCE TAXON ▾

38,322 OCCURRENCES   16 INFRASPECIES

1,035 OCCURRENCES WITH IMAGES

SEE GALLERY

30,928 GEOFERENCED RECORDS

Generated an hour ago © OpenStreetMap contributors, © OpenMapTiles, GBIF

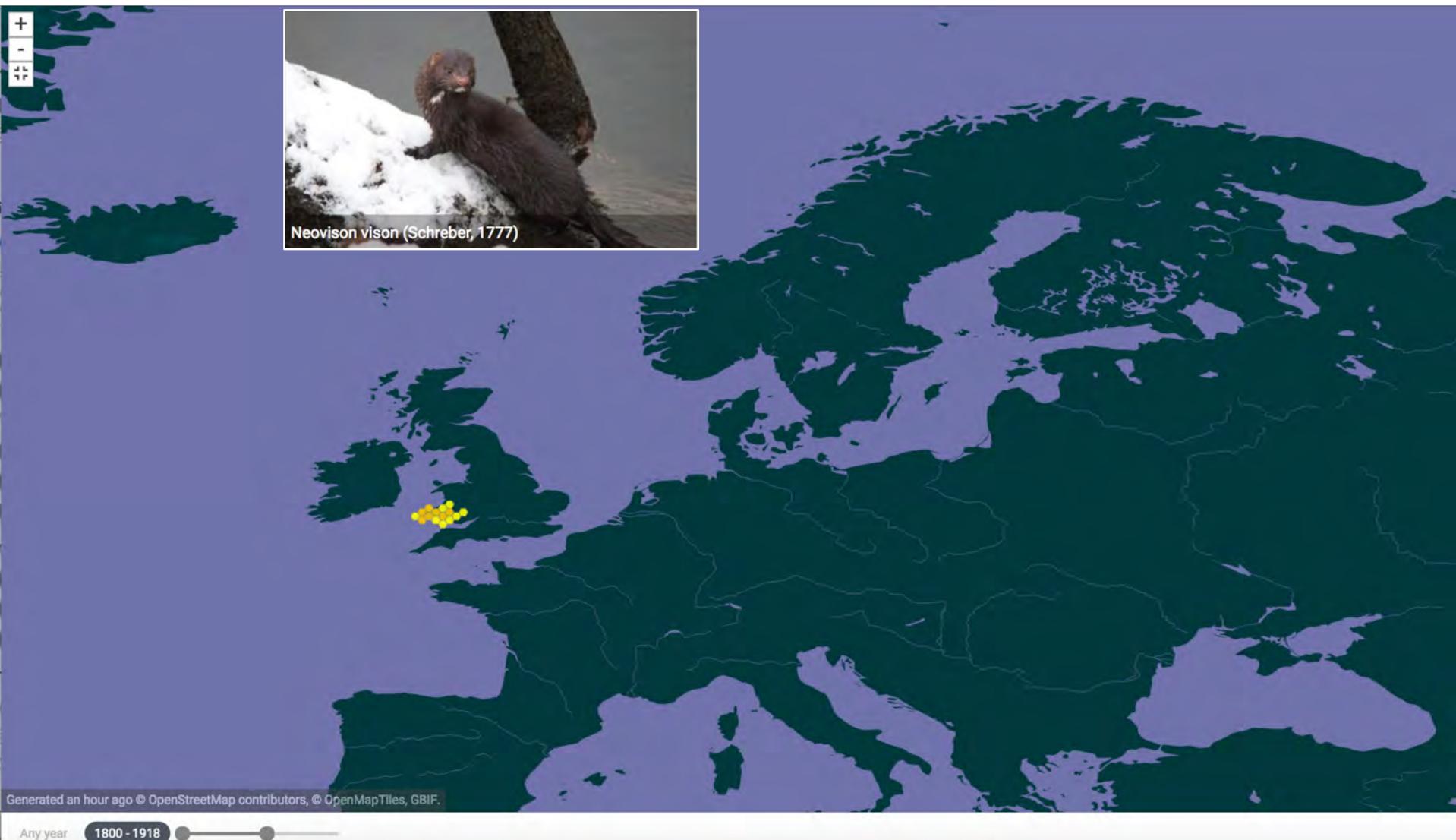
Any year   1600 - 2018

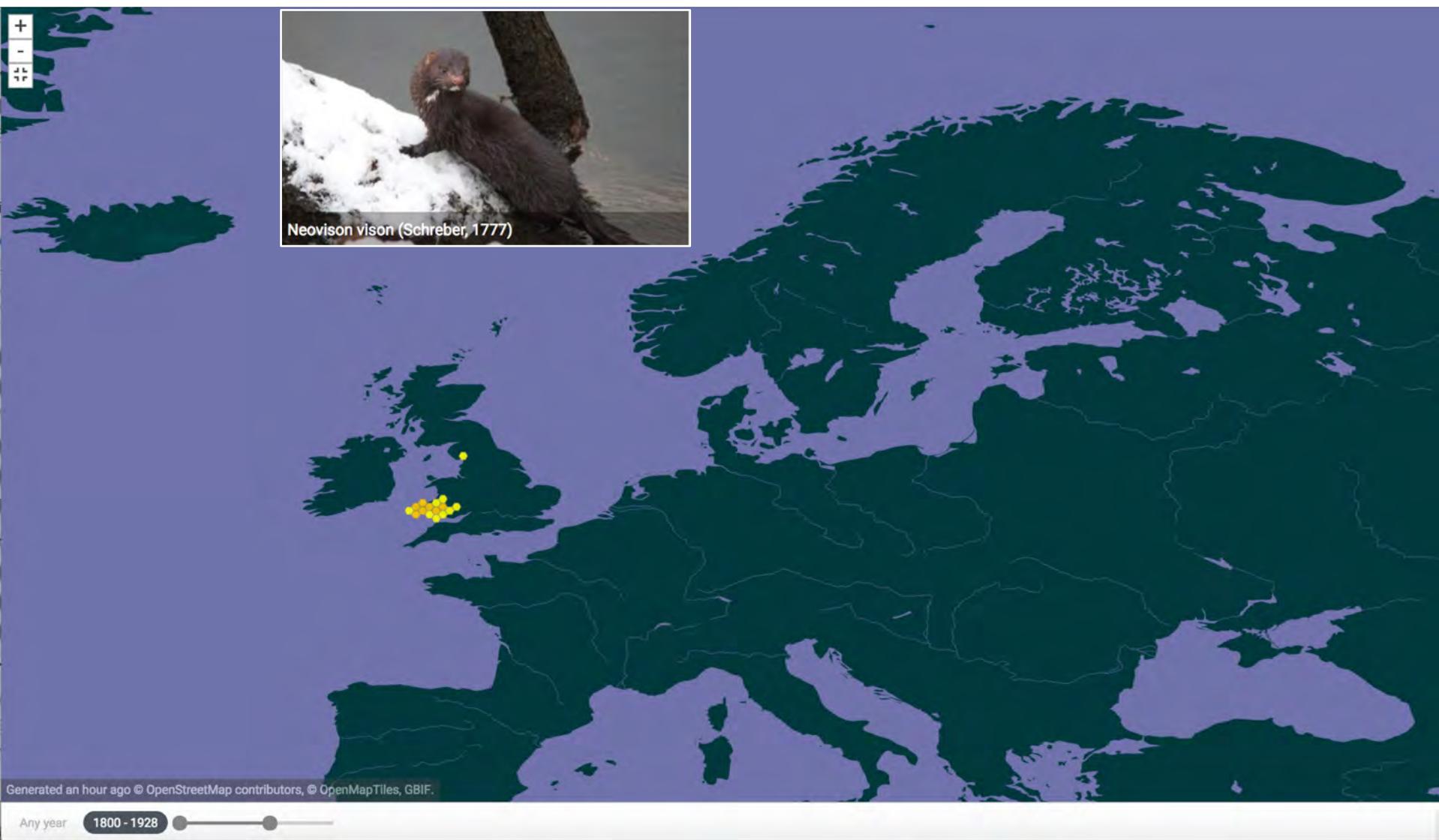
EXPLORE

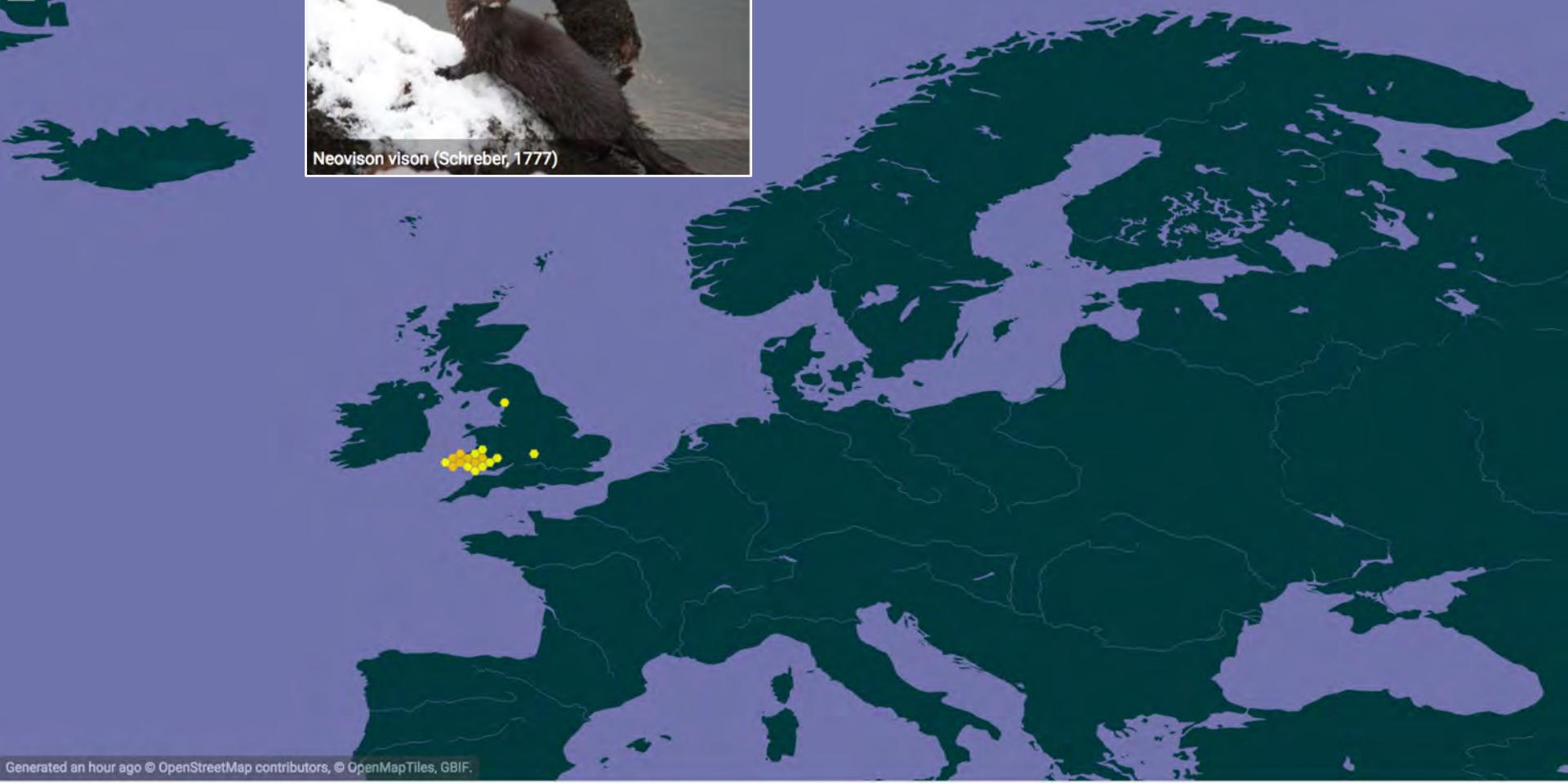
RECORDED AS INVASIVE IN 9 COUNTRIES AND ISLANDS

Recorded as invasive in	According to	Occurrences in GBIF
United Kingdom	Global Register of Introduced and Invasive Species- United Kingdom	12,779 occurrences
Denmark	Global Register of Introduced and Invasive Species- Denmark	1,873 occurrences
Italy	Global Register of Introduced and Invasive Species- Italy	4 occurrences

<https://www.gbif.org/species/2433652>







Generated an hour ago © OpenStreetMap contributors, © OpenMapTiles, GBIF.

Any year

1800 - 1938









Generated an hour ago © OpenStreetMap contributors, © OpenMapTiles, GBIF.

Any year

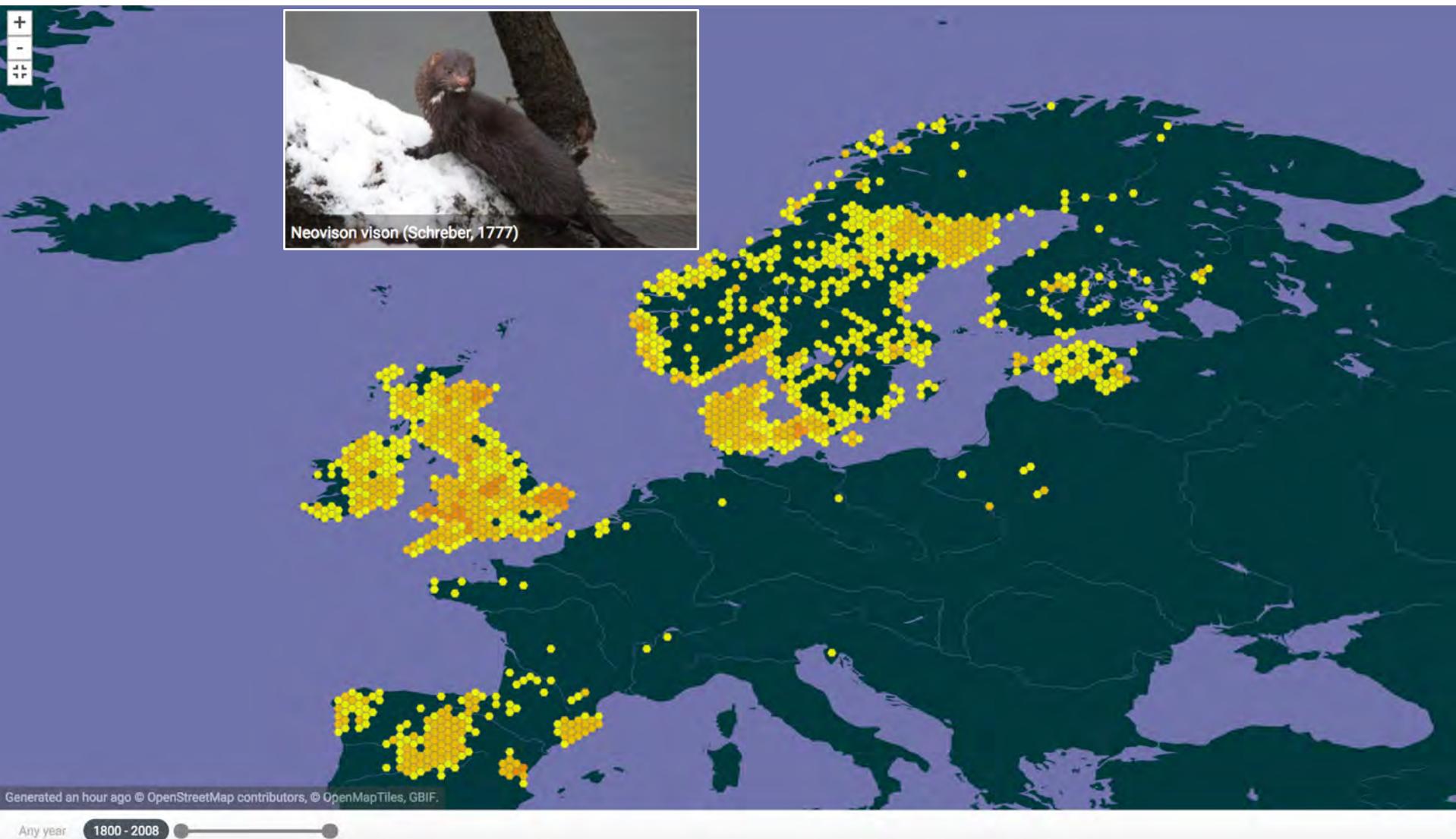
1800 - 1978

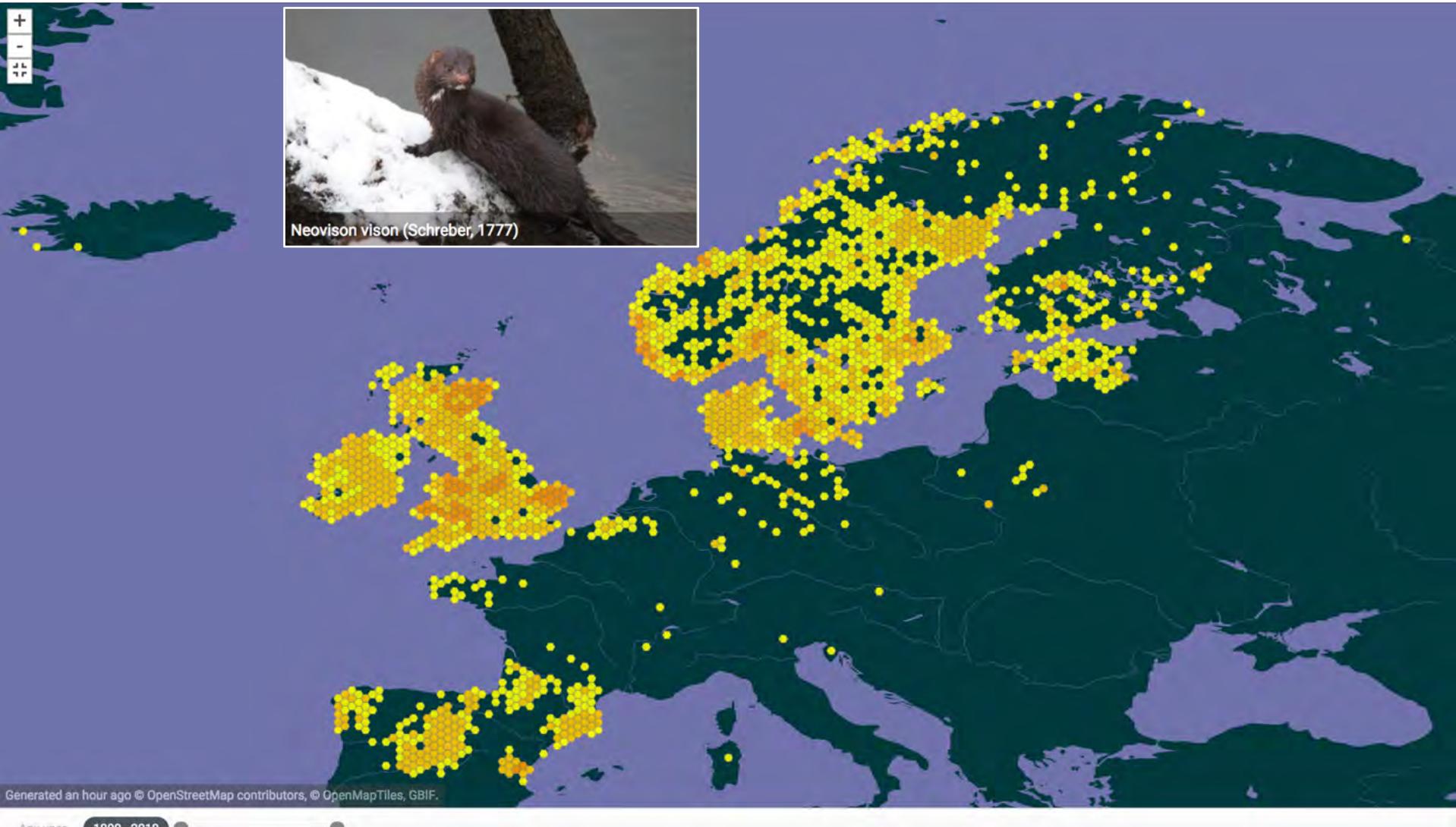




Any year

1800 - 1998





# NATIONAL POLICY INTEGRATION

The screenshot shows the Open Science Framework (OSF) project page for "Tracking Invasive Alien Species (TrIAS)". The top navigation bar includes links for "Files", "Wiki", "Analytics", and "Registrations". Below the title, there are buttons for "Public", "P 0", and an ellipsis. The main content area displays the project's details: Contributors (Quentin Groom, Tim Adriaens, Peter Desmet, Diéderik Strubbe, Thierry Backeljau, Etienne Branquart, Dimitri Brosens, Maximé Coupremanne, Amy JS Davis, Rozemien De Troch, Valérie De Waele, Sander Devisscher, Hilde Eggemont, Andre Heughebaert, Kris Hostens, Pierre Huybrechts, Jacquemart Anne-Laure, Arnaud Monty, Damiano Oldani, Thierry Onkelinx, Jean-Yves Parmentier, Tom Reusegher, Toon Van Daels, Ruben Van De Kerchove, Gert Van Hoev, Wouter Vannieuwenhoven, Bert Van Schaeveldt), Date created (2017-01-06 02:02 PM), Last updated (2018-10-09 02:08 PM), Identifier (DOI 10.17605/OSF.IO/7DPGR), Category (Project), Description (Building an open data-driven framework to support policy on invasive species), and License (CC-By Attribution 4.0 International). On the left, there is a "Wiki" section containing the TrIAS logo and text, and a "Citation" section showing components like "WP1 - Management" (Groom, Desmet, Adriaens & 25 more, WP leader: BGM).

Imagine a future where dynamically, from year to year, we can track the progression of **alien species (AS)**, identify emerging species, assess their current and future risk and timely inform policy in a seamless data-driven workflow. One that is built on open science and open data infrastructures. By using international biodiversity standards and facilities, we would ensure interoperability, repeatability and sustainability. This would make the process adaptable to future requirements in an evolving IAS policy landscape both locally and internationally.

# ENHANCING CAPACITY TO MOBILIZE INVASIVE SPECIES DATA

PROJECT | IN PROGRESS

## Regional and national alien and invasive species data mobilization and capacity building in the Pacific

1 Jul 2017 - 31 Jan 2019 € 175,000

ABOUT NEWS & EVENTS DATASETS



Stinking passionflower (*Passiflora foetida*). COURTESY OF SPREP

PROJECT | IN PROGRESS

## Tracking the red lionfish invasion in Barbados

1 May 2017 - 1 Dec 2018 € 5,000

ABOUT NEWS & EVENTS DATASETS



Lionfish (*Pterois volitans*). Curaçao. Photo by Laszlo Ilyes via Flickr, licensed under CC BY 2.0.

 **BID** Biodiversity Information for Development



# ENHANCING CAPACITY TO MOBILIZE INVASIVE SPECIES DATA

PROJECT | APPROVED

## Alien reptiles and amphibians of the Philippines

1 Apr 2018 - 31 Mar 2019 € 15,000

ABOUT



The American bullfrog (*Lithobates catesbeianus*) is one of several invasive amphibian species present in the Philippines. Photo (entitled "American Bullfrog") by Nameless.

PROJECT | APPROVED

## Mobilizing occurrence data of alien and endemic plant species of Nepal

1 May 2018 - 31 Mar 2019 € 14,006

ABOUT NEWS & EVENTS



The Himalayan mountain regions feature a high number of alien and endemic plant species. Photo (entitled "Snow and the flowers") by Nameless.



Ministry of the Environment

<https://www.gbif.org/programme/82629/bifa-biodiversity-information-fund-for-asia#projects>



# NEXT STEPS: LINKING TO THE CLEARING HOUSE MECHANISM

English | Español | Français | Русский | 中文



The Convention Cartagena Protocol Nagoya Protocol Programmes Information Secretariat



The 22nd meeting of the SBSTTA and the 2nd meeting of the Subsidiary Body on Implementation meet in Montreal, Canada from 2 to 13 July 2018 [Read More ▶](#)



Executive Secretary   
Cristiana Pașca Palmer

Countries 

Choose a country profile

# NEXT STEPS: INFORMING IPBES THEMATIC ASSESSMENT ON INVASIVE ALIEN SPECIES



[Log in](#) | [Register](#)

[About ▾](#) [Work programme ▾](#) [News ▾](#) [Calendar](#) [Documents ▾](#) [Resources ▾](#)

[Home](#) Call for nominations of experts – assessment of invasive alien species

## Call for nominations of experts – assessment of invasive alien species

**Announcement Number:** EM/2018/22

**Application period:** Thursday, 4 October, 2018 to Friday, 1 February, 2019

Notification

**File:** [em\\_2018\\_22\\_call\\_experts\\_ias\\_20180921\\_tsu3.pdf](#)

<https://www.ipbes.net/notification/call-nominations-experts-%E2%80%93-assessment-invasive-alien-species>



# NEXT STEPS: DEVELOPING INVASIVE SPECIES INDICATORS FOR POST-2020 BIODIVERSITY TARGETS



Aichi Target 9:  
Invasive Alien Species

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Thank you!