

# **The NOBANIS network on alien species and the development of a European Early Warning and Rapid Response System**

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**NOBANIS**

**European Network on Invasive Alien Species**

Gateway to information on Invasive Alien Species in North and Central Europe

# What is NOBANIS?

- a network between authorities of the region – management
- in 18 countries and 2 territories



+ Greenland, Svalbard and Faroe Islands

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# What does NOBANIS provide?

- a portal with access to information about alien species  
[www.nobanis.org](http://www.nobanis.org)
  - a central, searchable online database with information uploaded from all the NOBANIS countries
  - factsheets of the most invasive species in the region (currently 59)
  - info about national and international legislation
  - 4 newsletters / year
  - an invasive species photo bank

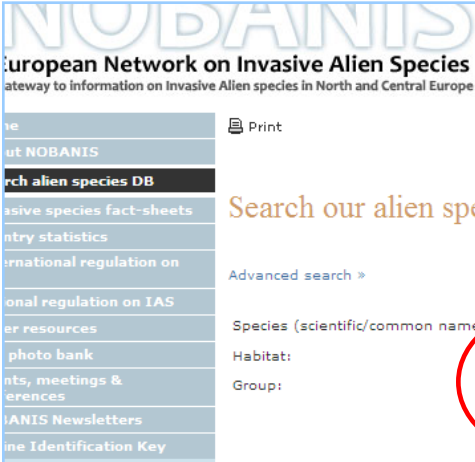


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# NOBANIS and marine species



European Network on Invasive Alien Species  
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- Home
- About NOBANIS
- Search alien species DB
- Invasive species fact-sheets
- Country statistics
- International regulation on IAS
- National regulation on IAS
- Other resources
- Photo bank
- Events, meetings & conferences
- NOBANIS Newsletters
- Interactive Identification Key



Print

## Search our alien species database

Advanced search >

Species (scientific/common name):

Habitat:

Group:

Country:   
Austria  
Belgium  
Czech Republic  
Denmark  
Estonia  
European part of Russia  
Faroe Islands  
Finland  
Germany  
Greenland  
Iceland  
Ireland  
Latvia  
Lithuania

Species with factsheet:

Search

Multiple selection - hold down CTRL-key

The database is being updated regularly by each participating country. By nature a database on alien species is under constant development as new species arrive, while others become extinct. Feel free to contact NOBANIS if you have questions about the data found here.

Number of hits: 93

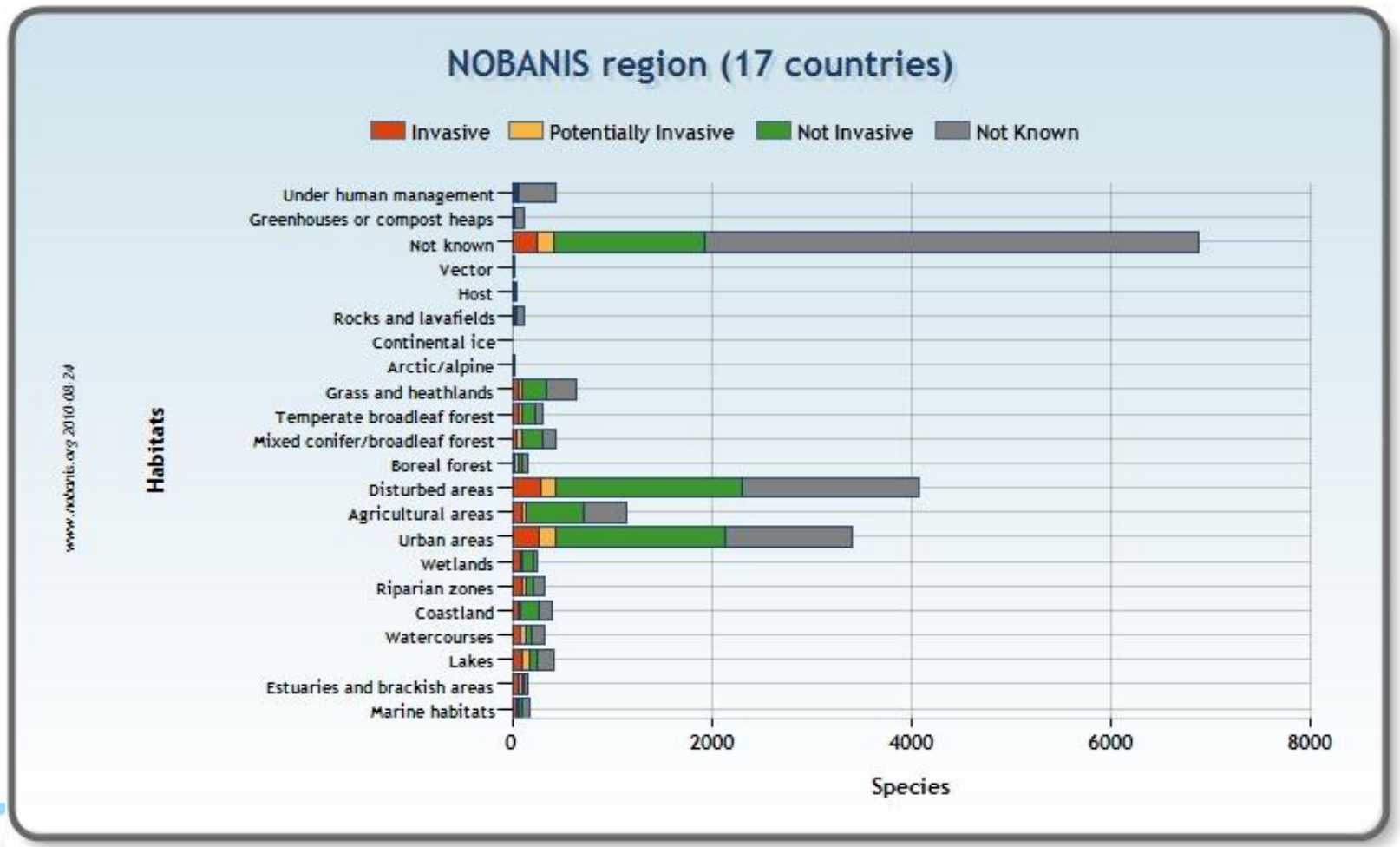
- **Acartia tonsa**  
Common name and synonyms: ærjas tömbik (tulnuk-tömbik) (EE), Hoppkräfta (SE)  
Group: Arthropods Family: Acartiidae

93 species  
in marine  
habitats

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# NOBANIS and marine species - habitats

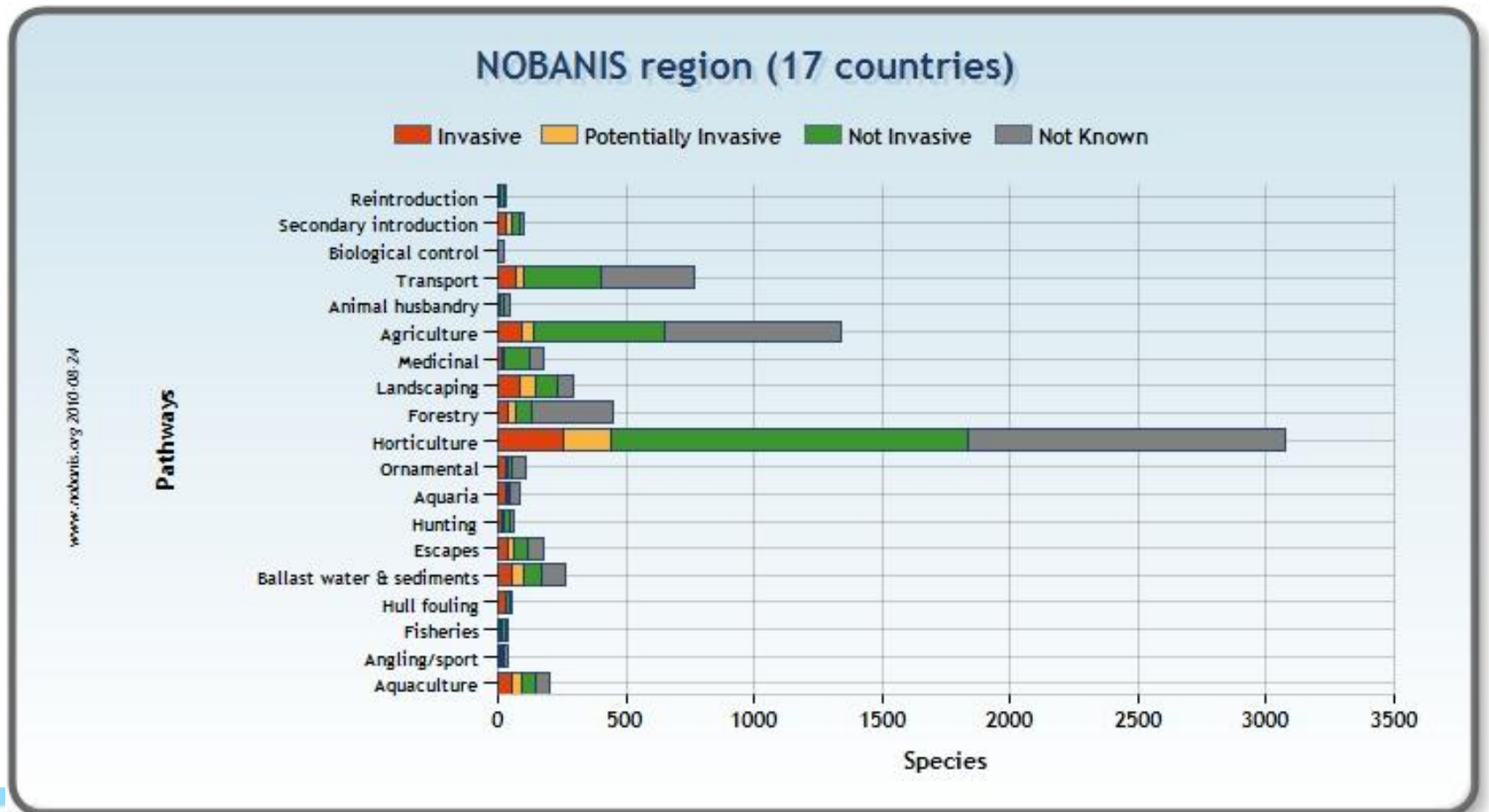


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# NOBANIS and marine species - pathways



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# Identification key to marine invasive species in Nordic waters



42 species with fact sheets

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*Crassostrea gigas* (Thunberg, 1793) – Pacific cupped oyster

- Identification
- Distribution
- Biology
- Impacts
- Control in Nordic waters


**Synonyms**

**Common names**  
Pacific oyster, Japanese oyster, Pacific cupped oyster (USA, CAN, UK), Striemoesterskalk (DK, NO), Fiskeauster, Pazifische Auster, Portugiesische Auster (DE), Surf mussel (SE), Habskita (IS), Auster (LT), Heil auster (LV), Ostjapansk pacifisk musling (PL), Japansk ostjapansk (SI)

There is a taxonomic problem of whether the Portuguese oyster, *Crassostrea angulata* (Lamarck, 1818) is synonymous with *C. gigas*. Apparently they produce fertile offspring, and this has been taken as proof of specific identity (Hedge, 1976; Havel et al., 2002), but later molecular studies have shown that *C. angulata* is a separate species, also of Asian origin (Boulay et al., 1998; Di Polighi et al., 1998; Lam & Horton, 2004).

**Identification**

*C. gigas* is similar to *Crassostrea virginica* from the American east coast, but *C. gigas* has distinct ribs and crenulate shell margins. *C. virginica* has a dark adductor muscle scar and the anterior margin longer than posterior one. *Crassostrea gigas* usually has a very light pigmented adductor muscle scar, whereas the adductor muscle scar of *C. virginica* is rather darkly pigmented, however, these two species often form natural hybrids that are intermediately pigmented (Battista et al., 2000). *C. angulata* Fuchs, 1818 (= *C. virginica* larvae, 1889; von Bourc, 1882) is another species that has been used in oyster culture (Lam & Horton, 2004) and has recently proposed for introduction to the east coast of the USA as a substitute for the declining population of *C. virginica* (Kiese et al., 2008).



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# Identification key to marine invasive species in Nordic waters - new fact sheets

- *Aristichthys nobilis*
- *Carassius gibelio*
- *Cyprinus carpio*
- *Neogobius melanostomus*
- *Oncorhynchus mykiss*
- *Salvelinus fontinalis*
- *Salmo salar*



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# Other functions of the NOBANIS network

- Part of a European Early warning Rapid Response system?
- The European Environment Agency has published a new report on early warning in June 2010:

“Towards an early warning and information system for invasive alien species (IAS) threatening biodiversity in Europe”



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# The main components of a European Early Warning and Rapid Response System

- Horizon scanning
- Detection, monitoring, surveillance
- Diagnosis
- Quick screening
- Risk assessment
- Reporting and circulation of information
- Response
- Follow up

Genovesi et. al 2010

The logo for NOBANIS features the word "NOBANIS" in large, bold, white capital letters with a slight shadow effect, set against a blue background that includes a stylized map of Europe. The letters are slightly transparent, allowing the map behind them to be visible.

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NOBANIS workshop

## **Developing an early warning system for invasive alien species (IAS) based on the NOBANIS database**

- Input to the European Commission for further work on EU Strategy on IAS
- Input into development of a European Early Warning & Rapid Response system
- Test the NOBANIS information system to see how it could be used in an Early Warning and Rapid Response system



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# Consensus at the workshop

- We need a centralised European structure
- The EU Commission must take initiative

*To ensure a well coordinated and cost effective rapid response to the threats posed by IAS.*

- In the mean time we can give input

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# Workshop recommendations on how a European Early Warning Rapid Response system can best be constructed and developed

For all components of the system:

- Added value of a single Early Warning & Rapid Response System
- Role of the European Commission in development of an European Early Warning System



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# NOBANIS pilot projects for an Early Warning Rapid Response system

- Email alert (Early warning)
- IAS risk mapping in Europe



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# Email alert (Early warning)

## *Notification message, minimum requirements*

- Scientific name
- Where and when recorded (introduced)
- Habitat type/description of where found
- Is there a specimen?
- Contact details
- Actions taken?



**Species alert**

*Tamias sibiricus*

*Procyon lotor*

## *Early warning message*

- Synonyms
- Alien status
- Year of introduction (before or after xx)
- Pathway of introduction
- Impact
- Frequency (rare common etc.)
- Spread capacity
- Status (casual or established)
- Management options
- Ecology / fact sheet link
- References (who)
- Type of record (picture, specimen etc)

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Thanks!

Please visit [www.nobanis.org](http://www.nobanis.org) or  
contact [nobanis@sns.dk](mailto:nobanis@sns.dk) for more information.



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