



# Les espèces exotiques envahissantes

## Réglementation européenne et enjeux pour le Luxembourg

**Luxembourg, 20 mars 2018**  
**Musée national d'histoire naturelle**



LE GOUVERNEMENT  
DU GRAND-DUCHÉ DE LUXEMBOURG  
Ministère du Développement durable  
et des Infrastructures

Département de l'environnement



# EU Regulation 1143/2014 on invasive alien species

Nora Elvinger



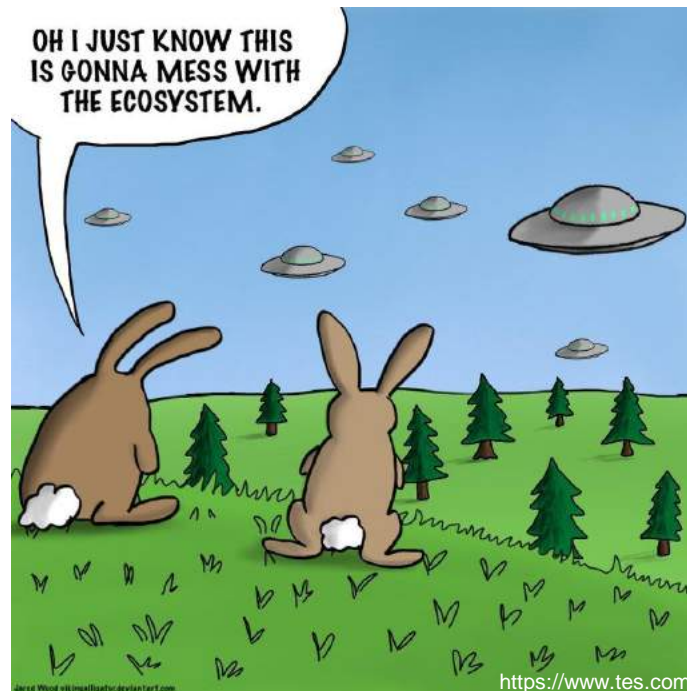
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## ➤ Invasive alien species...

- are plants, animals, pathogens and other organisms that are non-native to an ecosystem, and which may cause economic or environmental harm or adversely affect human health





## ➤ Invasive alien species...

- are plants, animals, pathogens and other organisms that are non-native to an ecosystem, and which may cause economic or environmental harm or adversely affect human health
- are usually vectored accidentally or voluntarily by human transportation and trade
  - EU: 12.000 alien species (10-15% invasive)
  - Globalisation: ↗ 76% in number of IAS in Europe since 1970

**... arrive, survive and thrive**





## ➤ Invasive alien species...

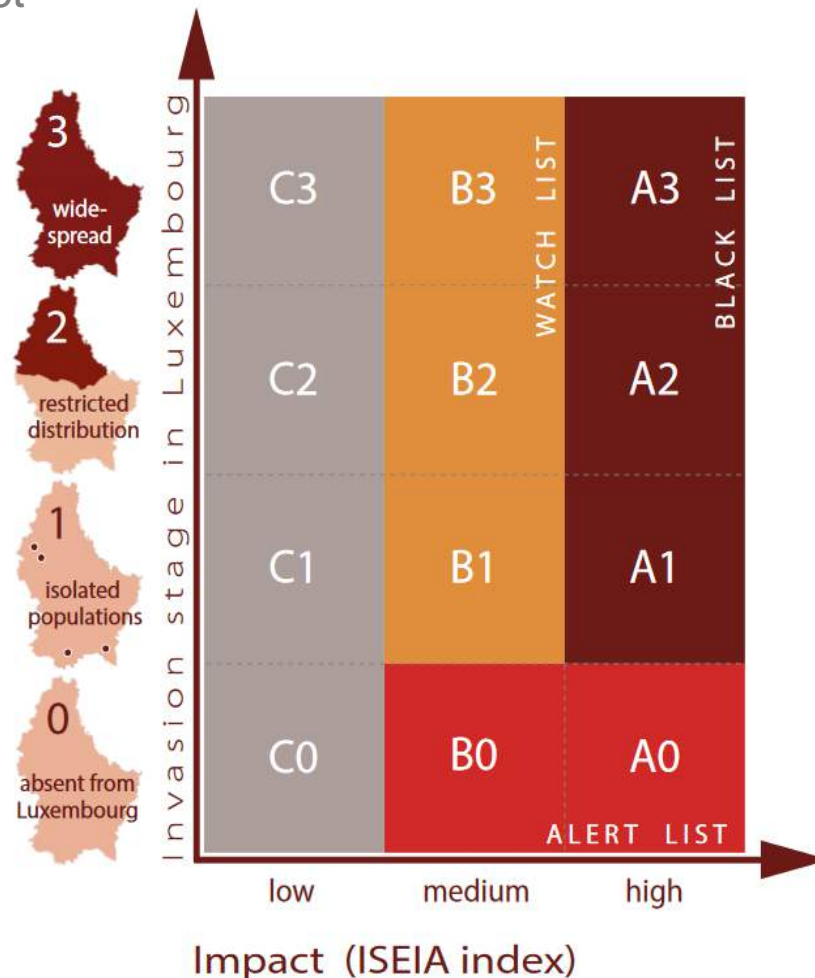
- are the 2<sup>nd</sup> biggest driver of species extinction (1<sup>st</sup> on islands)
- are a global threat to:
  - human health
  - economic activities
- cause socio-economic costs of almost 5% of global GDP
  - EU: > 20 billion EUR/year



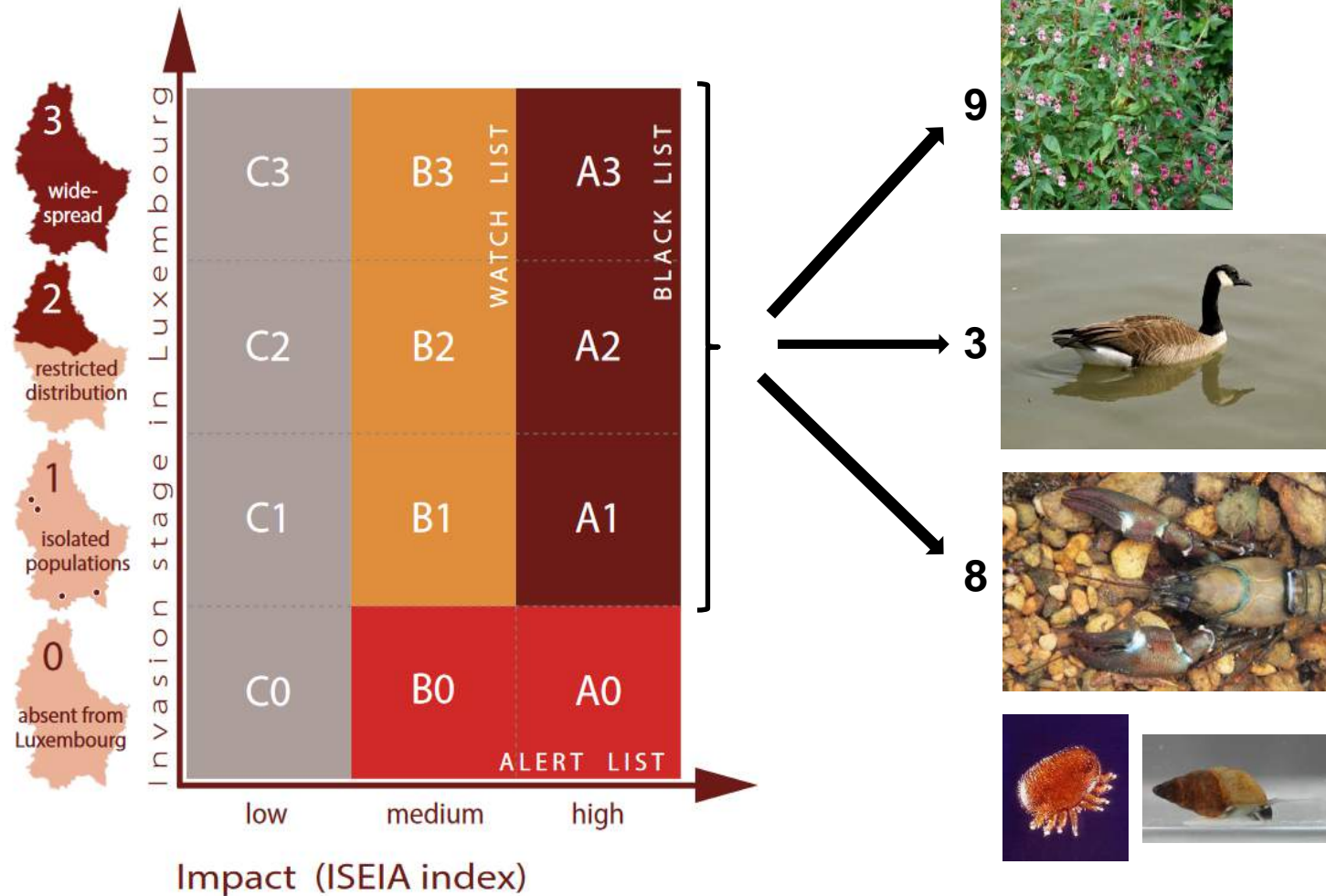


## ➤ ISEIA = Invasive Species Environmental Impact Assessment

- Ecological impact
- 4 parameters
- Index: 4-12



# Black List



# Watch List



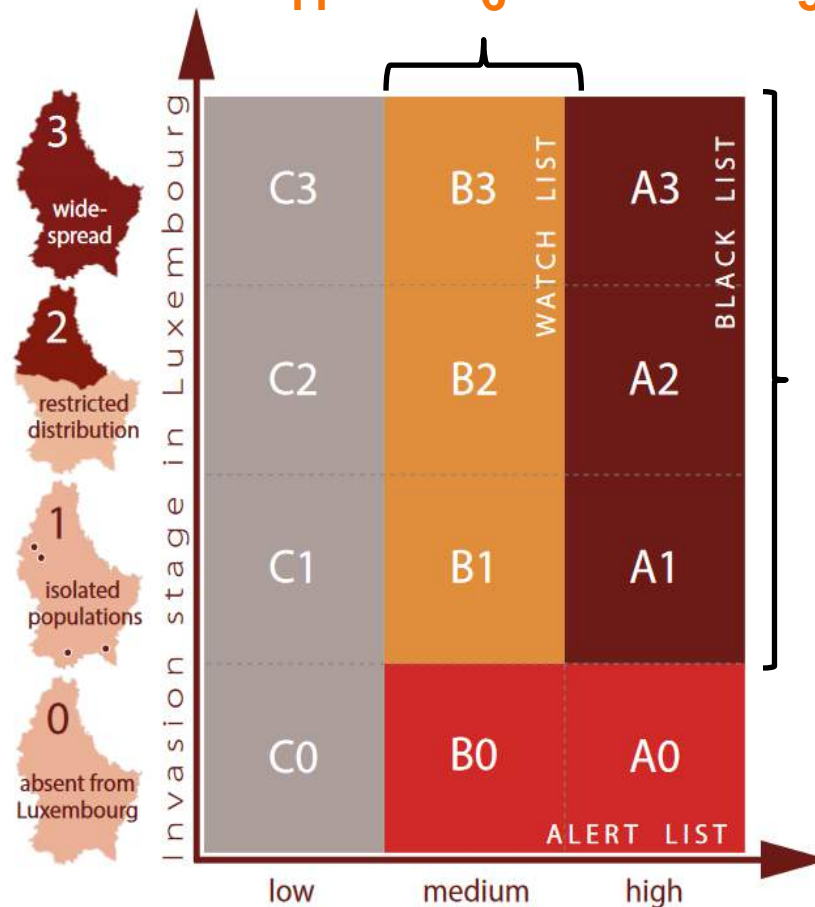
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11

6

5



9



3



8





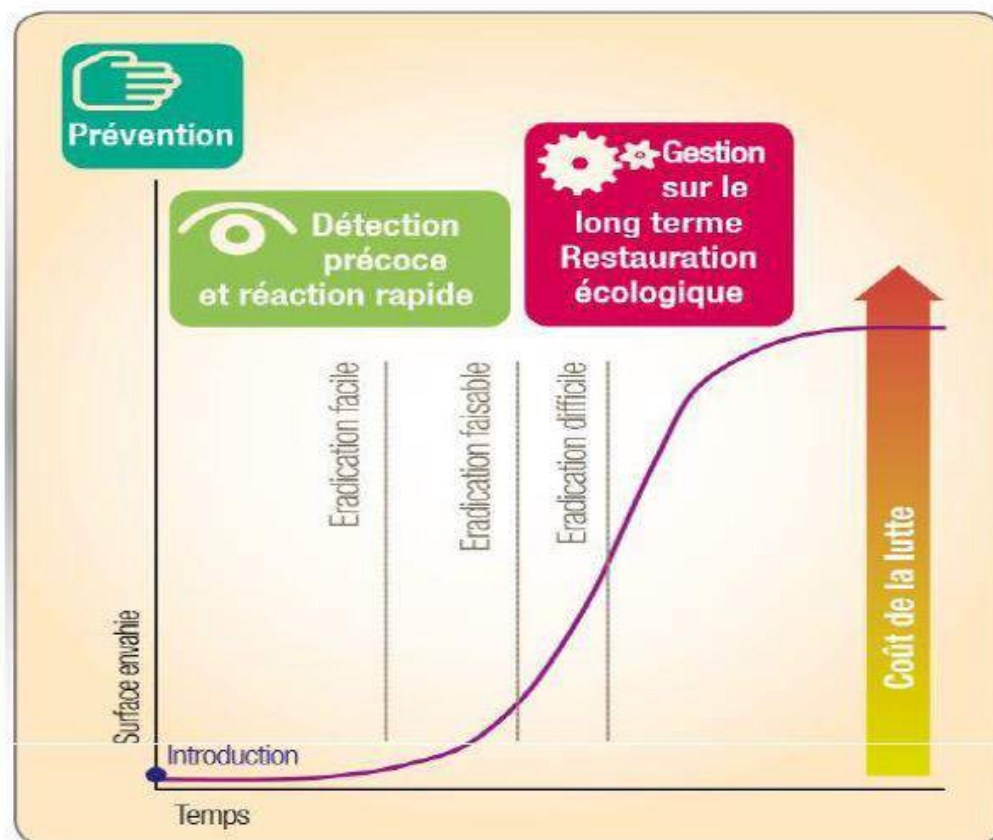


- *Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species*

- 1<sup>st</sup> January 2015

## ➤ Objectives

- Prevention
- Early detection & rapid eradication
- Management



\*Diagram from IUCN France (2015)



## ➤ Restrictions (Art. 7)

« IAS shall not be intentionally:

- (a) brought into the territory of the Union, including transit under customs supervision;
- (b) kept, including in contained holding;
- (c) bred, including in contained holding;
- (d) transported to, from or within the Union, except for the transportation of species to facilities in the context of eradication;
- (e) placed on the market;
- (f) used or exchanged;
- (g) permitted to reproduce, grown or cultivated, including in contained holding; or
- (h) released into the environment. »



- Permits (Art. 8)
  - *Research and ex situ conservation*
  - *Delivered by the MDDI*
- Authorisations (Art. 9)
  - *Compelling public interest*
  - *Delivered by the EU Commission*
- IAS of Member State concern (Art. 12)
  - *Règlement grand-ducal to come*
- Action plans on the priority pathways of introduction and propagation of IAS (Art. 13)
  - *Deadline: July 2019*

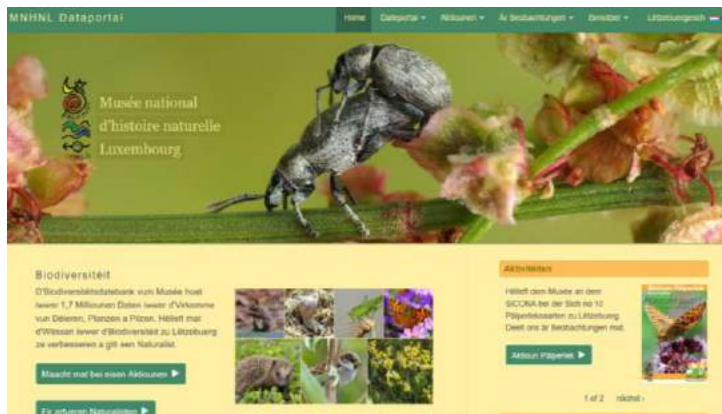




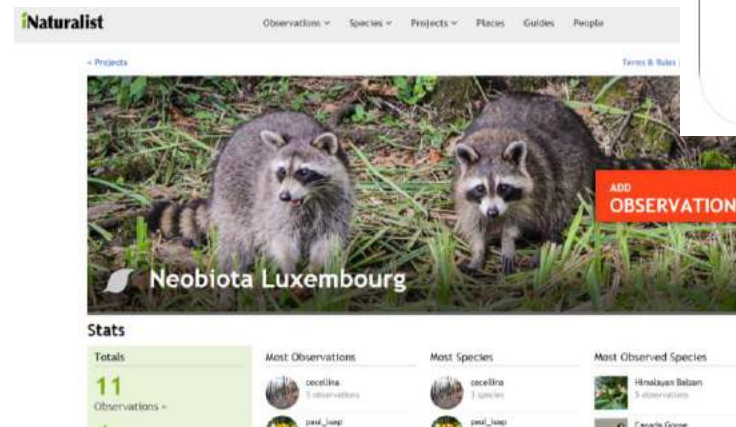
## ➤ Surveillance system (Art. 14)

- Systematic monitoring -> enhancement of ongoing biomonitoring programs for Flora-Fauna-Habitats Directive, Birds Directive, Water Framework Directive
- Casual observations & Citizen science -> email alert system

[data.mnhn.lu](http://data.mnhn.lu)



[inaturalist.org](http://inaturalist.org)



## ➤ Early detection notifications (Art. 16) & Rapid eradication measures (Art. 17)



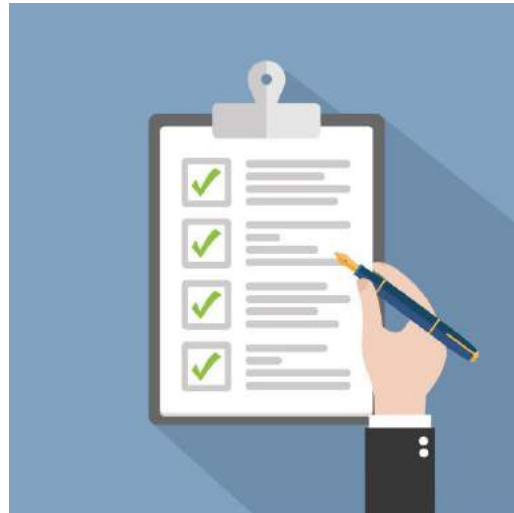
- Management measures (*Art. 19*)
  - *Proportionate to the impact & based on a cost-benefit analysis*
  - *Eradication, population control or containment*
  - *Action plans in elaboration & Public consultation foreseen*
- Restoration of the damaged ecosystems (*Art. 20*)





## ➤ Reporting & Review (Art. 24)

- *Periodicity: every 6 years*
- *1st report due by 1 June 2019*
  - *description of the surveillance system*
  - *distribution of the IAS of Union concern*
  - *information on the eradication measures taken, the management measures, their effectiveness, and their impact on non-targeted species;*
  - ...





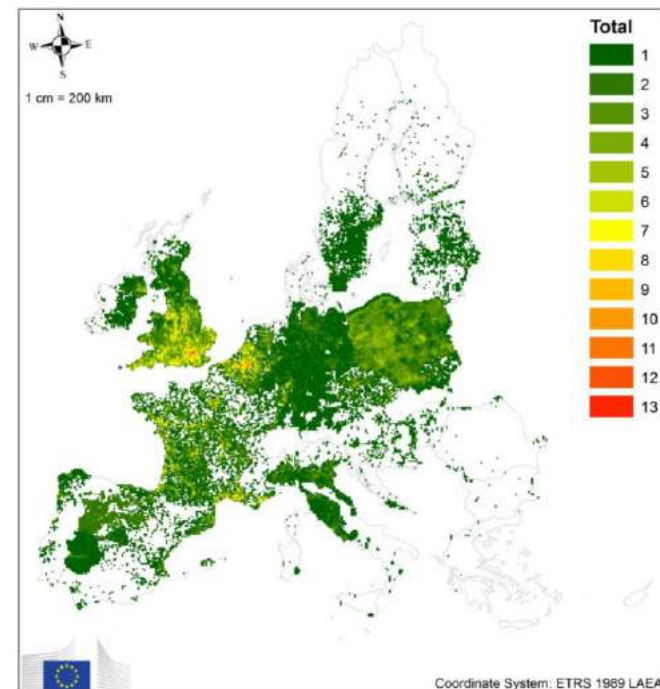
- Cross border cooperation
- Public participation
- Committee & Scientific Forum
- Penalties
- Transitional provisions for non-commercial owners
- Transitional provisions for commercial stocks



- IAS are included in the Union list:
  - *alien to the Union & establishing viable populations and spreading;*
  - *likely to have a significant adverse impact on biodiversity and maybe on human health or the economy;*
  - *risk assessment demonstrated that concerted action at Union level is required;*
  - *inclusion on the Union list will likely effectively prevent, minimise or mitigate their adverse impact.*

➤ 1<sup>st</sup> list: July 2016 (37 sp.)

➤ 1<sup>st</sup> update: July 2017 (12 sp.)



Tsiamis K et al. *Baseline Distribution of Invasive Alien Species of Union concern*. Ispra



# IAS of Union concern – plants (23)



## PLANTS

Scientific name	English name	Entry into force
<i>Alternanthera philoxeroides</i>	Alligator weed	2 August 2017
<i>Asclepias syriaca</i>	Common milkweed	2 August 2017
<i>Baccharis halimifolia</i>	Eastern baccharis	3 August 2016
<i>Cabomba caroliniana</i>	Fanwort	3 August 2016
<i>Eichhornia crassipes</i>	Water hyacinth	3 August 2016
<i>Elodea nuttallii</i>	Nuttall's waterweed	2 August 2017
<i>Gunnera tinctoria</i>	Chilean rhubarb	2 August 2017
<i>Heracleum mantegazzianum</i>	Giant hogweed	2 August 2017
<i>Heracleum persicum</i>	Persian hogweed	3 August 2016
<i>Heracleum sosnowskyi</i>	Sosnowsky's hogweed	3 August 2016
<i>Hydrocotyle ranunculoides</i>	Floating pennywort	3 August 2016
<i>Impatiens glandulifera</i>	Indian balsam	2 August 2017
<i>Lagarosiphon major</i>	Curly waterweed	3 August 2016
<i>Ludwigia grandiflora</i>	Water-primrose	3 August 2016
<i>Ludwigia peploides</i>	Floating primrose-willow	3 August 2016
<i>Lysichiton americanus</i>	American skunk cabbage	3 August 2016
<i>Microstegium vimineum</i>	Japanese stiltgrass	2 August 2017
<i>Myriophyllum aquaticum</i>	Parrot's feather	3 August 2016
<i>Myriophyllum heterophyllum</i>	Broadleaf watermilfoil	2 August 2017
<i>Parthenium hysterophorus</i>	Whitetop weed	3 August 2016
<i>Pennisetum setaceum</i>	Crimson fountaingrass	2 August 2017
<i>Persicaria perfoliata</i>	Asiatic tearthumb	3 August 2016
<i>Pueraria lobata</i>	Kudzu vine	3 August 2016



*Heracleum mantegazzianum*  
(Giant hogweed)



*Elodea nuttallii*  
(Nuttall's waterweed)



*Impatiens glandulifera*  
(Himalayan balsam)



*Myriophyllum aquaticum*  
(Parrot's feather)

# IAS of Union concern – animals (26)



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## ANIMALS

Scientific name	English name	Entry into force
<i>Alopochen aegyptiacus</i>	Egyptian goose	2 August 2017
<i>Callosciurus erythraeus</i>	Pallas' squirrel	3 August 2016
<i>Corvus splendens</i>	Indian house crow	3 August 2016
<i>Eriocheir sinensis</i>	Chinese mitten crab	3 August 2016
<i>Herpestes javanicus</i>	Small Asian mongoose	3 August 2016
<i>Lithobates catesbeianus</i>	American bullfrog	3 August 2016
<i>Muntiacus reevesi</i>	Muntjac deer	3 August 2016
<i>Myocastor coypus</i>	Coypu	3 August 2016
<i>Nasua nasua</i>	Coati	3 August 2016
<i>Nyctereutes procyonoides</i>	Raccoon dog	2 February 2019
<i>Ondatra zibethicus</i>	Muskrat	2 August 2017
<i>Orconectes limosus</i>	Spiny-cheek crayfish	3 August 2016
<i>Orconectes virilis</i>	Virile crayfish	3 August 2016
<i>Oxyura jamaicensis</i>	Ruddy duck	3 August 2016
<i>Pacifastacus leniusculus</i>	Signal crayfish	3 August 2016
<i>Percottus glenii</i>	Amur sleeper	3 August 2016
<i>Procambarus clarkii</i>	Red swamp crayfish	3 August 2016
<i>Procambarus fallax f. virginalis</i>	Marbled crayfish	3 August 2016
<i>Procyon lotor</i>	Raccoon	3 August 2016
<i>Pseudorasbora parva</i>	Stone moroko	3 August 2016
<i>Sciurus carolinensis</i>	Grey squirrel	3 August 2016
<i>Sciurus niger</i>	Fox squirrel	3 August 2016
<i>Tamias sibiricus</i>	Siberian chipmunk	3 August 2016
<i>Threskiornis aethiopicus</i>	Sacred ibis	3 August 2016
<i>Trachemys scripta</i>	Red-eared, yellow-bellied and Cumberland sliders	3 August 2016
<i>Vespa velutina nigrithorax</i>	Asian hornet	3 August 2016



# Thank you for your attention!



- Luxembourg: [neobiota.lu](https://neobiota.lu)
- Regulation & IAS Brochure: [ec.europa.eu](https://ec.europa.eu)
- Distribution in Europe on EASIN: [easin.jrc.ec.europa.eu](https://easin.jrc.ec.europa.eu)

## Neobiota Luxembourg Project & Guide: [www.inaturalist.org](https://www.inaturalist.org)



**Neobiota Luxembourg**

Totals	Most Observations	Most Species	Most Observed Species
<b>11</b> Observations »	cercellina 3 observations	cercellina 3 species	Himalayan Balsam 5 observations
<b>4</b> Species »	peul_luop 4 observations	peul_luop 4 species	Canada Goose 3 observations
<b>4</b>	torwart 1 observation	torwart 1 species	Japanese Knotweed 2 observations