

Alien Species



Invasive Alien Species
are considered as one
of five reasons of
biodiversity losses.





Hello, human,
I'm an alien.



How different
are you?

Let's me tell you.



Invasive alien species (IAS) are species that are from other regions. They can establish and spread themselves dominantly in the new environment. They may cause extinction of local species and threaten biodiversity, resulting in environmental and economic loss, and health problems. Pigeons, giant sensitive tree, giant African snails are examples of invasive alien species.

In other words, they are living organism coming from other countries and causing environmental and socio-economic losses.



Hello, I'm a panda. I'm an alien species too, but not invasive though.



I'm a house sparrow. I'm an invasive alien species.



Alien species are introduced species, by any means, to a region in which they had never existed before. Ability of such species to live or reproduce in new environment depends on suitable conditions and their adaptation. They are such as tulips, giraffes and hamsters.





How can those alien species come to your country?

Did they come here by UFO like me?

We humans brought them here.



There are more than 2,000 alien species in Thailand.
These are the ways of introduction.



Coming with

- vehicles
- travel
- transportation
- tourism
- ballast water



Spreading from neighbouring countries.

Introduced for

- agriculture
- farming
- domestication
- decoration
- collection in zoos and botanic gardens



Alien Species in Thailand





Alien species are all around us and we gain a lot of benefit from them.

Benefits of Aliens Species

Many alien species in Thailand become beneficial. The examples of those alien species are below.



Strawberry
(as food)



Spearmint
(for herbal use)



Para rubber tree
(as commodities)



Pomeranian (as pets)



Panda
(for collection in zoos)



Ornamental plants
(for collection in botanic gardens)



Invasive Alien Species

Invasive alien species are one of the five factors that threaten biodiversity globally. They compete with local species for food and habitats, change elements and structure of ecosystems, carry diseases. We spend plenty of funds for control and eradication.



Water hyacinth is a free-floating aquatic plant native to South America. It hinders water transportation and blocks sunlight from reaching underwater life, resulting in reduction of oxygen in water and death of some native aquatic plants and animals. Moreover, it also competes against local aquatic plants for nutrients.

The giant sensitive tree is native to tropical America. It is serious weed and is widespread. It forms dense thickets which block other plants from growing and are hard to be eradicated. It is generally found along waterside and causes shallowness of invaded water sources, resulting in ecosystem change.

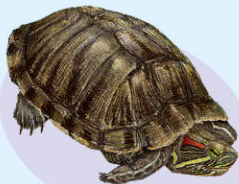


The apple snail is also native to South America. It eats rice in paddle fields. It competes against local snails for food, leading to extinction of its local competitors.

Some alien species cause damage so they are called invasive alien species.



The **suckermouth catfish** is native to Central and South America. It competes with local fishes for food and habitats, resulting in decreasing numbers of local species. It causes debris of river banks because of holes it made there. Fishing tools are also affected from its invasiveness.



The **red-eared slider** is native to the United States. It can spread faster than Thai tortoises and competes against them for food and habitats. In the past, the red-eared slider was considered as pet in the US and Canada and were a vector of salmonellosis.





How can you save this world ?



My friends and I can save the world by just following these dos and don'ts.

Dos

1. Planting local plants and raise local animals in order to conserve them and save your money.
2. Have responsibility for raising exotic animals.
3. Notify governmental agencies, if you observe spread of invasive exotic plants and animals in nature, or eradicate them by yourselves.
4. Think about how to make use of alien species, for example changing them to products like feed or fertilisers.
5. Distribute information about alien species to your family, friends and other people.
6. Work together with somebody else in surveying or observing alien animals and alien plants that more likely to cause negative effects, and find solution to solve the problems that may occur.

Don'ts

1. Purchase or sell alien species.
2. Distribute invasive alien species in order to prevent their spreading to natural ecosystems.
3. Release exotic animals and plants that are no longer needed to nature.
4. Support moral by releasing exotic animals such as suckermouth catfishes, red-eared sliders and apple snails.
5. Bring pets to conservation areas.



Let's play
a game.



Match the words with the correct images
of alien species.

1



Red-Eared Slider

2



Green Cabomba

3



American Crayfish

4



Pigeon

5



Piranha

6



Water lettuce

7



Ferret

8



Iguana

9



Blue Frog




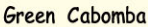

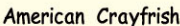





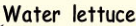








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Giant African Snail



Answer: Match the words with the correct images of alien species.

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Thank you

<http://www.google.com>

<http://animal.xo.com/>

<http://tw.myblog.yahoo.com/>

<http://www.bloggang.com/>



Bio Kit for Kids

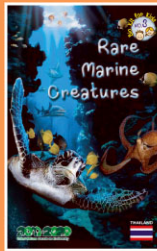
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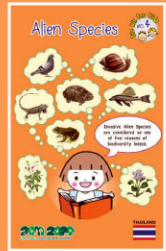
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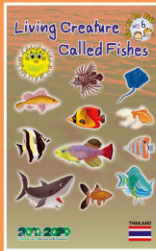
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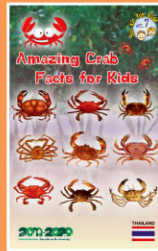
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No. 6



No. 7



Biological Diversity Division
Office of Natural Resources and Environmental
Policy and Planning
Ministry of Natural Resources and Environment
THAILAND
<http://chm-thai.onep.go.th>