

Achieving Aichi Biodiversity Target 9

Guidance on devising
and implementing
measures to address the
risks associated with the
introduction of alien species
as pets, aquarium and
terrarium species, and
as live bait and live food

Annex to decision XII/16
of the Conference of the
Parties to the Convention
on Biological Diversity



Convention on
Biological Diversity



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on Biological
Diversity

Achieving Aichi Biodiversity Target 9

Sustainable Development Goal Target 15.8

- 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**
- By 2020, **introduce measures to prevent the introduction** and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

Risks and potential sufferers

Invasion

- Biodiversity
- Ecosystems, habitats or native species

Phyto-sanitary

- Health of plants
- Agricultural production

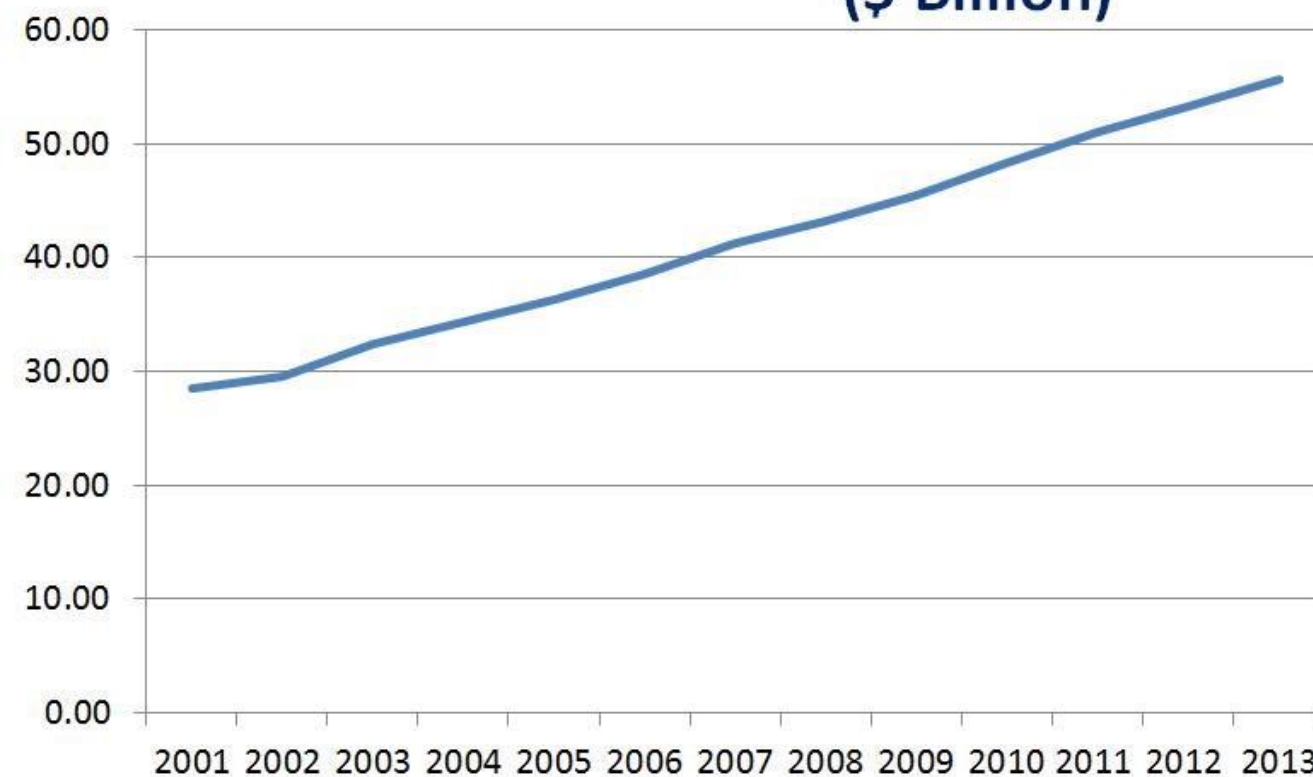
Sanitary

- Health of animals, humans
- Animal production

Pets industry market size

(American Pet Products Association statistics)*

Pet industry expenditure in USA*
(\$ Billion)



Estimated purchases
of live animals in USA
\$2.19 billion in 2015*

FAO STAT **

Live animal import value in 2011
\$ 7.55 million (World)
\$ 1.07 million (USA)

*http://www.americanpetproducts.org/press_industrytrends.asp

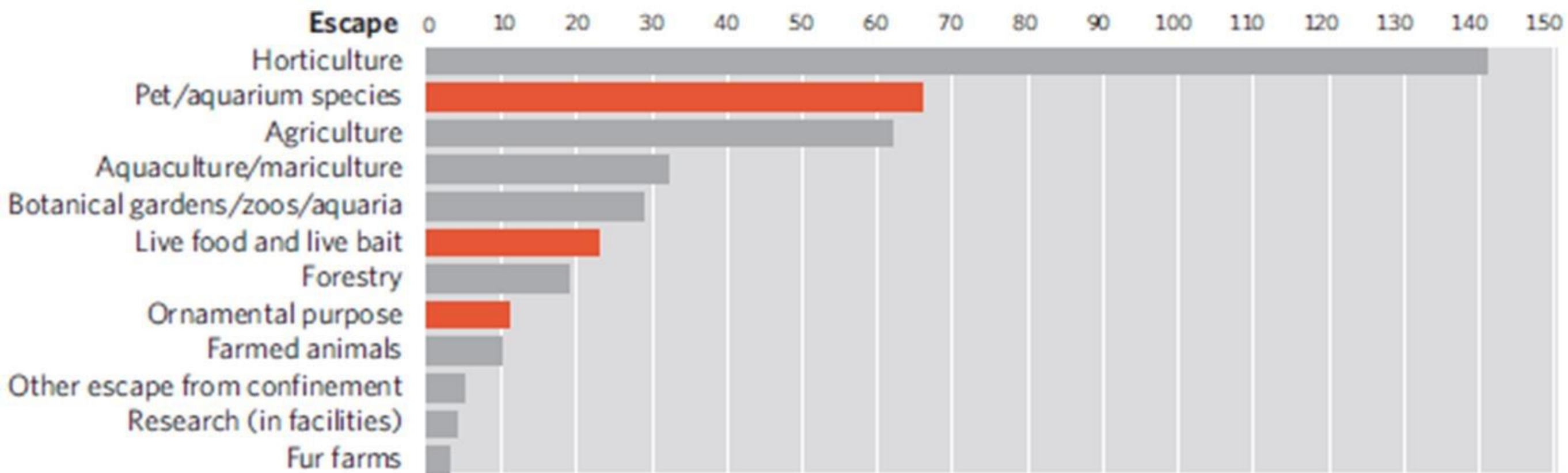
** <http://faostat.fao.org/site/604/DesktopDefault.aspx?PageID=604#ancor>

The approximate composition of pet population

(Pet Food Manufacturers Association Pet. Population Statistics)

- **40-45 million ornamental fish**
- **9 million dogs**
- **8 million cats**
- **>2 million small mammals**
- **>2 million domestic fowl and caged birds**
- **400,000 lizards**
- **400,000 snakes**
- **300,000 tortoises and turtles**
- **100,000 insects**

Pets, aquarium species, terrarium species, and live bait and live food



Frequencies of escapes known cases of introduction of over 500 invasive alien species profiled in the Global Invasive Species Database (GISD). Source: *Global Biodiversity Outlook 4th edition*

n.modernfarmer.com/wp-content/uploads/2014/09/formica



ムネアカオオアリ



UP!!

初めてアリを飼う方にもオススメ！

6,480円

在庫数：0

ムネアカオオアリ



UP!!

初めてアリを飼う方にもオススメ！

7,400円

在庫数：0

ムネアカオオアリ




UP!!

初めてアリを飼う方にもオススメ！

9,800円

在庫あり

注文数：

 カートに入れる

トゲアリ




NEW

女王1匹 トゲアリ働きアリ300~350匹

32,000円

在庫数：2

注文数：

 カートに入れる

オオズアリ



NEW

女王3匹 働きアリ2500匹

34,800円

在庫数：0

日本の黒いアリ（クサアリ）



NEW

撮影用などに最適
働きアリ200匹

9,800円

在庫数：0

e-Commerce for
hobbyests

<http://antroom.cart.fc2.com>



CASE STUDY 2

Water hyacinth *Eichhornia crassipes*

■ Despite being widely favored as a beautiful ornamental plant for ponds, water hyacinth has been labelled as the world's worst water weed. Experts suspect that water hyacinth was first imported to Africa by botanists and gardeners as an ornamental plant in 1980's. This invasive species is efficient in utilizing aquatic nutrients and solar energy, which altered ecosystem services and processes threatening the survival of native species. The economic loss caused by its invasion was above US\$ 700 million, estimated in South Africa. Due to its exceptional reproductive output, water hyacinth has rapidly colonized important water bodies in Africa including Lake Victoria, the second largest freshwater lake in the world supporting approximately 30 million people and over 350 endemic species of East African cichlids.

CASE STUDY 1

Burmese python *Python molurus* subsp. *bivittatus*

■ Introduced in Florida through pet trade, Burmese pythons are known to prey on federally endangered native species such as Wood storks and Key Largo woodrats. From 1999 to 2009, the recovery of these two species has cost federal and state agencies \$101.2 million and \$1.4 million, respectively. As competitors due to the overlap in diet, Burmese pythons affect the survival of the state and federally threatened indigo snake (*Drymarchon couperi*). The growing concern is highlighted by their ability to rapidly reproduce and spread.



CASE STUDY 4

Chinese mitten crab *Eriocheir sinensis*

■ Nominated as among 100 of the “World’s Worst” invaders, Chinese mitten crabs inflict substantial economic and ecological harm in European and American freshwaters. As an opportunistic omnivore, Chinese mitten crabs consume a wide range of native species resulting in a significant decline in their competitors including rare or endangered crayfish species that share similar diet and habitat preferences. The economic loss caused by this species in German waters is approximately 80 million euros since 1912. The main pathways of its introduction and spread include live food trade, aquarium trade and ships’ ballast water.

Source: IUCN-Invasive Species Specialist Group (<http://www.issg.org/database/species/ecology.asp?si=38>)



Hazard identification in live species trade



Two Vampire Crab Species Found, Are Already Popular Pets

Spooky-eyed crustaceans sold as aquarium pets are two previously unknown species from Indonesia, a new study says --- By **James Owen**, National Geographic

PUBLISHED March 16, 2015

<http://news.nationalgeographic.com/2015/03/150316-vampire-crabs-animals-new-species-science-pets/>

CBD Guidance (2014)

- Voluntary guidance for States, relevant organizations, the industry and consumers, including all actors along the value chain
- Covers species, lower taxa and hybrids
- *Requires consistency with other international obligations – e.g. WTO Agreement on Application of Sanitary and Phytosanitary Measures*

CBD Guidance - measures

- Risk assessment, incl. risk of **escape**
 - Alien species that have not been subjected to a risk assessment should be treated as having the potential to become invasive
- Raising awareness and develop capacity among all persons involved in transporting, handling, selling, using or keeping
- Labelling on consignments – taxon; genotype; TSN or equivalent; and if safety is not proven as a ***potential hazard to biodiversity***

SBSTTA20 discussion points on invasive alien species

- Invasion risks associated with trade in wildlife
- Biological control agents against IAS
- Decision support tools

<https://www.cbd.int/doc/meetings/sbstta/sbstta-20/official/sbstta-20-07-en.pdf>

Summary

- Trade in pets, aquarium and terrarium species, and live bait and live food is growing rapidly.
- Risk of biological invasion has not sufficiently been assessed or not even identified.
- Harmonized measures on live species commodity is urged:
 - Confinement methods for live species
 - Hazard labelling
 - Surveillance (escapes, establishment)
 - Cleanliness (contaminants/hitchhikers)