

Comunicazione



Innovazione
Come funzionano le navi ecologiche



Ecologico

Mini guide to **invasive alien species**



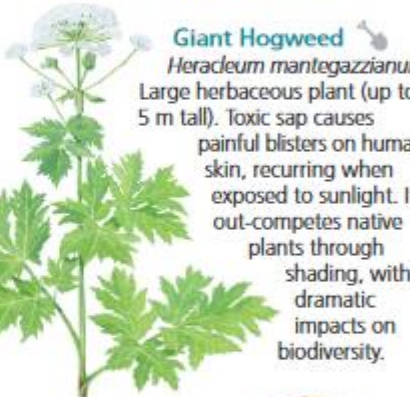
Emerald Ash Borer
Agilus planipennis
Small beetle whose larvae feeds under the bark of Ash trees causing substantial damage and dieback, and even death of infected trees.



Monk Parakeet
Myiopsitta monachus
Loud and noisy parakeet that damages crops, changes communities of urban birds and transmits wildlife disease. It also builds nests which can cause damage to infrastructure.



Water Primrose
Ludwigia grandiflora
Aquatic plant that spreads rapidly, changing species communities but also interfering with navigation, abstraction and drainage.



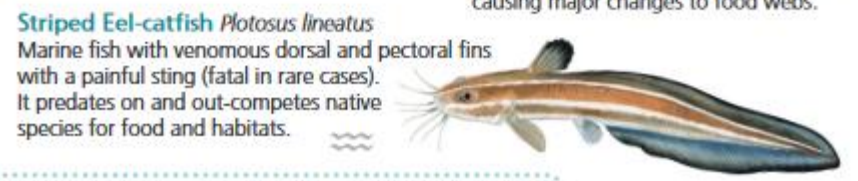
Giant Hogweed
Heracleum mantegazzianum
Large herbaceous plant (up to 5 m tall). Toxic sap causes painful blisters on human skin, recurring when exposed to sunlight. It out-competes native plants through shading, with dramatic impacts on biodiversity.



Finlayson Squirrel
Callosciurus finlaysonii
Squirrel that causes damage to both deciduous and coniferous trees, stripping bark which can cause trees to die.



Killer Shrimp
Dikerogammarus villosus
Highly aggressive freshwater amphipod shrimp that preys on other invertebrates, causing major changes to food webs.



Striped Eel-catfish *Plotosus lineatus*
Marine fish with venomous dorsal and pectoral fins with a painful sting (fatal in rare cases). It predate on and out-competes native species for food and habitats.

- Cluster groups**
- Forest ecosystems
 - Pet species
 - Angling
 - Aquatic ornamentals
 - Soil transport

Illustrations © Chris Shields **FSC**

Biodiversità

Invasive Alien Species

How they impact

- | | | | |
|----------------------|-------------|-----------------------------|-------------|
| Competition | Grazing | Predation | Parasitism |
| Hybridisation | Bio-fouling | Poisoning | Flamability |
| Disease transmission | | Interactions with other IAS | |



Outcomes of impact



Environmental

e.g.

- Modification of hydrology
- Native species declines
- Soil erosion
- Primary production alteration
- Plant/animal health
- Habitat degradation

Socio-economic

e.g.

- Agricultural damage
- Reduced access to water
- Infrastructure damage
- Human health
- Damage to forestry
- Reduction in tourism

Ricerca scientifica

Conoscenza

Educazione ambientale

Capacità di gestire l'informazione

Consapevolezza della complessità ambientale

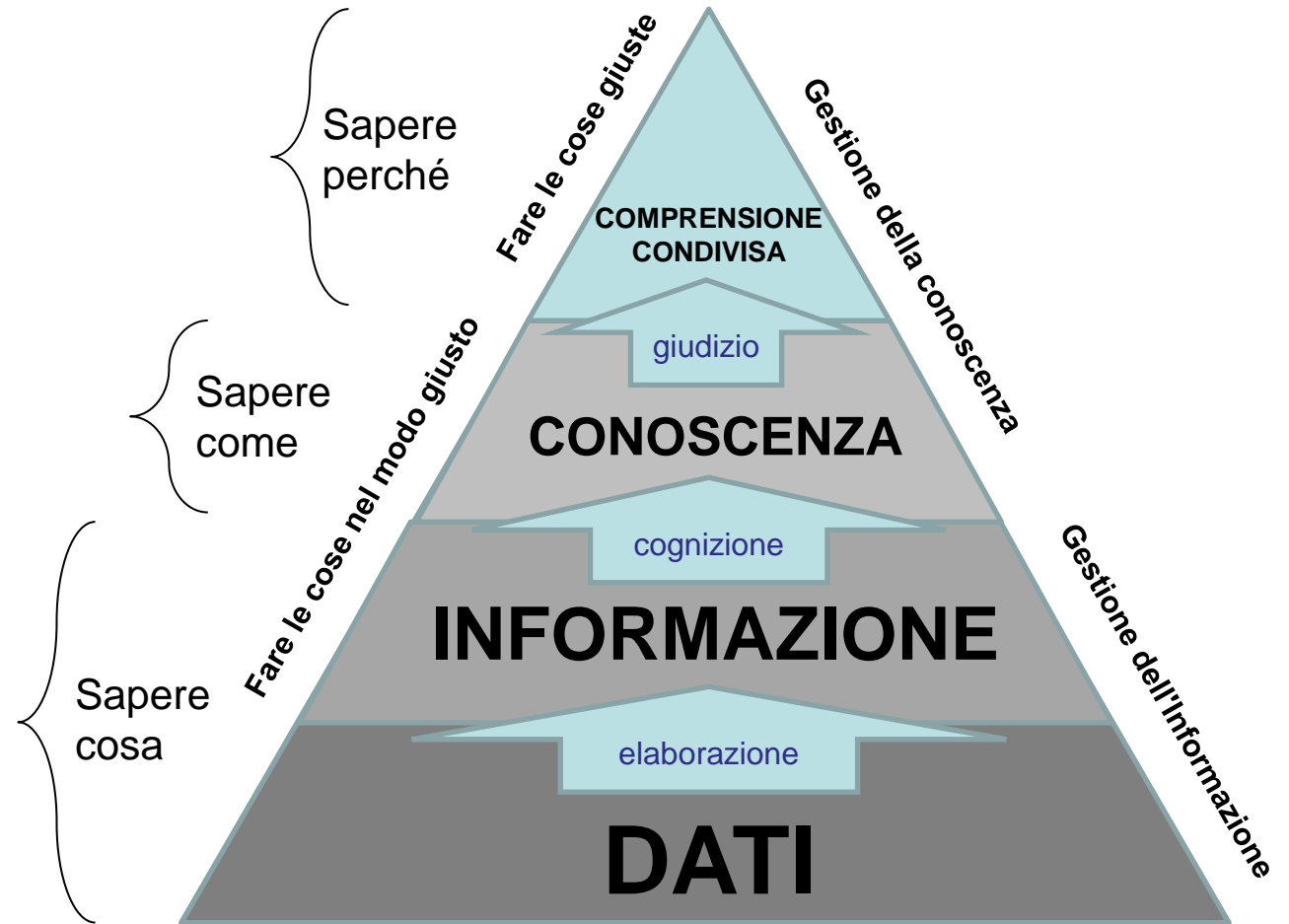
Corretto approccio all'ambiente naturale

Gestione del patrimonio naturale come risorsa sostenibile

Relazione con il proprio territorio



Informazione disintermediata



Ogni giorno vengono generati circa 3 quintilioni
(3 * 1.000.000.000.000.000.000.000.000.000.000) di byte
(1 byte = 8 bit)



think **GLOBAL**,
act **LOCAL**

