* *[Rhinocyllus conicus](https://en.wikipedia.org/wiki/Rhinocyllus_conicus%22%20%5Co%20%22Rhinocyllus%20conicus)*, a seed-feeding weevil, was introduced to North America to control exotic [thistles](https://en.wikipedia.org/wiki/Thistle) (Musk and Canadian). However the weevil does not target only the exotic thistles; it also targets native thistles that are essential to various native insects which rely solely on native thistles and do not adapt to other plant species.
* The [mongoose](https://en.wikipedia.org/wiki/Mongoose) was introduced to [Hawaii](https://en.wikipedia.org/wiki/Hawaii) in order to control the [rat](https://en.wikipedia.org/wiki/Rat) population. However it preyed on the [endemic birds of Hawaii](https://en.wikipedia.org/wiki/Endemic_birds_of_Hawaii), especially their [eggs](https://en.wikipedia.org/wiki/Egg_%28biology%29), more often than it ate the rats. (Note, however, that the introduction of the mongoose was not undertaken based on scientific—or perhaps any—understanding of the consequences of such an action. The introduction of a generalist mammal for biocontrol of anything would be unthinkable by any reasonable standards today.)
* 5 cats brought to the [subantarctic](https://en.wikipedia.org/wiki/Subantarctic) [Prince Edward Islands](https://en.wikipedia.org/wiki/Prince_Edward_Islands) to catch mice in 1949 multiplied to 3,400 in about two decades and started to threaten local extinction of birds. They had to be infected with [feline distemper](https://en.wikipedia.org/wiki/Feline_distemper) virus. The rest were shot and completely eliminated by the 1990s.
* The sturdy and prolific [mosquito fish](https://en.wikipedia.org/wiki/Gambusia_holbrooki) was introduced from around the Gulf of Mexico to around the world in the 1930s and 40s to combat [malaria](https://en.wikipedia.org/wiki/Malaria); however, it was found to cause the decline of local fish and frogs through competition of other food source as well as eating their eggs

### Effects on invasive species



The invasive species [*Alternanthera philoxeroides*](https://en.wikipedia.org/wiki/Alternanthera_philoxeroides) (alligator weed) was controlled in [Florida](https://en.wikipedia.org/wiki/Florida) (U.S.) by the introduction of [*Agasicles hygrophila*](https://en.wikipedia.org/wiki/Agasicles_hygrophila) (alligator weed flea beetle)

Biological control programs aim to reduce or eliminate populations of ecologically and agriculturally harmful invasive species. Examples where this has been achieved include:

* The [alligator weed](https://en.wikipedia.org/wiki/Alligator_weed) was introduced to the United States from [South America](https://en.wikipedia.org/wiki/South_America). This aquatic weed spreads rapidly and causes many problems in lakes and rivers. The weed takes root in shallow water causing major problems for [navigation](https://en.wikipedia.org/wiki/Navigation), [irrigation](https://en.wikipedia.org/wiki/Irrigation), and [flood control](https://en.wikipedia.org/wiki/Flood_control). The [alligator weed flea beetle](https://en.wikipedia.org/wiki/Agasicles_hygrophila) and two other biological controls were released in [Florida](https://en.wikipedia.org/wiki/Florida). Because of their success, Florida banned the use of herbicides to control alligator weed three years after the controls were introduced.
* [*Galerucella calmariensis*](https://en.wikipedia.org/wiki/Galerucella_calmariensis), a leaf beetle, has been introduced in North America as a control agent for purple loosestrife (*[Lythrum salicaria](https://en.wikipedia.org/wiki/Lythrum_salicaria%22%20%5Co%20%22Lythrum%20salicaria)*).
* In the late 19th century [cottony cushion scale](https://en.wikipedia.org/wiki/Icerya_purchasi) was discovered in the Californian [citrus](https://en.wikipedia.org/wiki/Citrus) industry, and it was feared that severe economic losses would result. However the [vedalia beetle](https://en.wikipedia.org/wiki/Vedalia_beetle) and, subsequently, [*Cryptochaetum iceryae*](https://en.wikipedia.org/w/index.php?title=Cryptochaetum_iceryae&action=edit&redlink=1), a parasitoid fly, were introduced to control the pest. Within a few years the cottony cushion scale was controlled and the citrus industry suffered little financial loss]
* *Salvinia molesta* is a major aquatic weed. It covers many waterways causing damage to water flow and the ecosystem. This weed was incorrectly identified at first. Scientists found weevils eating this weed. They named this species of weevils *Cyrtobagous salviniae*. The weevils have become a great biological control success for all countries.
* Prickly pear cacti, *Opuntia* spp., were introduced into Queensland, Australia as an ornamental plant. It quickly spread to cover over 25 million hectares of Australia. Two control agents were used to help control the spread of the plant. These were *Cactoblastis cactorum*, a Lepidopteran species, and *Dactylopius* spp., several Hemipteran species