

Nature Notes 14: Help! Aliens Have Landed

A major problem in Conservation Biology is caused by organisms “hitchhiking” between countries and continents, using humans to help them disperse to new regions free from the natural enemies that normally control their populations. It might seem that this would result in a welcome increase in biodiversity. Unfortunately, it is often accompanied by a decrease in the native plants and animals.

In Swannington this was dramatically demonstrated when North American mink invaded the parish. Where Swannington Beck crosses the fen on Uppgate Common, the banks used to be honeycombed with water vole burrows. A streamside walk was often accompanied by the loud “plops” of water voles (immortalised by Kenneth Graham as “Ratty” in the ‘Wind in the Willows’) diving into the Beck.

Initially released from fur farms by animal rights protesters, mink rapidly spread throughout the UK and within two decades they had reduced the number of water voles by 90%. Thanks to a very concerted control effort mink have not been seen in Swannington for over a decade and water voles are beginning to return.



Mink (Wijon.com)



Himalayan Balsam
(friendsofmillhousespark.com)

Alien plants can be equally harmful. On the commons, we have three particularly virulent intercontinental invaders: Himalayan balsam, Japanese knotweed and New Zealand pygmy stonewort. Himalayan balsam, grows up to 2 metres high, and has mauve and maroon flowers and explosive seed pods which burst suddenly to disperse the seeds. One can see how damaging Himalayan balsam can be by visiting Booton Common, parts of which are covered with Himalayan Balsam outcompeting the native fen vegetation. Thanks to extremely vigilant work by Steve Williams and the conservation volunteers, the spread of this alien has been largely controlled in Swannington. If you do see one please help them by uprooting it and carrying the flowers/seeds away for safe disposal.

Japanese knotweed is harder to deal with because even small fragments of root can grow new shoots. A colony near to the road on Alderford Common is proving particularly difficult to eliminate. So is New Zealand pygmy stonewort, which is forming a blanket across the “Roadside Pond” on Alderford Common and in the “Hoss Pond” on Uppgate Common. Trying to clear this mechanically is counterproductive as any tiny fragment of stem has the potential to grow into a new whole plant. To stop it outcompeting all other water plants, so reducing egg laying-sites for great crested newts, it has to be killed by shading it using black plastic sheeting.



New Zealand Pygmy Stonewort
(habitats)



Brush tail possum (Wildlife QLO)

Many islands have evolved their own endemic species of plants and animals so are particularly susceptible to alien invaders, e.g. rats transported on ships. A particularly devastating mammalian invader is the brushtail possum, originally introduced to New Zealand from Australia in the 19th C for fur farming. Its populations rapidly increased to an estimated 60 million and totally changed the species composition and ecology of native forests by defoliating preferred food species and eating the eggs and young of native birds. Using GPS satellite telemetry, colleagues and I mapped seasonal changes in their diet and habitat use so that control efforts could be targeted more precisely. It must be one of the world’s most detested animals. When a New Zealander spots

one at night they deliberately drive onto the opposite side of a road to mow it down. (even though, as my daughters would say, “Aagh! Aren’t they cute?”)

Mark (January 2018)