

Thank you



Wildlife Trust for
**Beds, Cambs
& Northants**

This is to certify that you have adopted a **tansy beetle**

Tansy beetle *Erinaceus europaeus*

The Tansy beetle was once widespread in the UK, but now has a severely restricted and declining distribution, due to a reduction in suitable wetland habitat and food plants.

Until 2014, the last remaining UK population was thought to be on the River Ouse in York. The Tansy beetle was thought to be extinct in the East Anglian Fens but was rediscovered in 2014 at Woodwalton Fen by entomologist Dr Peter Kirby.



A handwritten signature in black ink, appearing to read 'M. I. Jackson'.

Matt Jackson, Director of Conservation

Brian Eversham



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A guide to tansy beetles – jewels of the reedbed

The tansy beetle is a rare and enigmatic species of leaf beetle. It measures 7.7-10.5mm in length and has a characteristic bright green metallic colour. Its name derives from its food plant, tansy, and its wing cases were so admired by Victorians that they were used as sequins!



Tansy beetle distribution

Authenticated records show that the distribution of tansy beetles in Britain has always been centred on the Yorkshire Ouse and the East Anglian Fens, with the odd outpost elsewhere. Currently they are only found on three sites: the Yorkshire Ouse, Woodwalton Fen and Welney reserve. Woodwalton Fen was one of the first nature reserves in England and is now owned by the Wildlife Trust BCN. Welney is a Wildfowl and Wetlands Trust site.

Tansy beetle behaviour

As this species is so rare and elusive, relatively little is known about its ecology. Although they have wings, they have not been seen flying in Britain; they find new food plants and habitats by walking and only travel around 200m in search of food. This limits how far populations can spread and interbreed with one another.

The York population mainly feeds on tansy *Tanacetum vulgare*, occasionally feeding on gypsywort *Lycopus europaeus* and marsh woundwort *Stachys palustris* where these are nearby.

However, the fenland populations do not appear to feed on tansy. Instead, their main food plants are water mint, gypsywort, hemp-nettle and marsh woundwort.

Understanding the overwintering habits of tansy beetles is important if we are to protect them. The York population burrows deep into the soil during winter, whereas in the Fens, with the winter water table often at or above ground level, this would not be possible.

Tansy beetle life cycle

Both the larvae and adults use the same host plant during their life cycle. As tansy often grows in clumps, individuals may spend their entire life within an area of a few square metres!

Adults mate between March and June, with females then laying batches of 3-15 elongated yellow eggs on the underside of the tansy leaves. Eggs hatch into grey larvae, and in July, the final instar* larvae burrow underground to pupate. They emerge to feed in August and September before disappearing back underground to overwinter in October.



*beetles shed their exoskeletons (moult) in order to develop; each developmental stage is known as an instar.

Threats to tansy beetles

The tansy beetle is listed as Endangered in Britain. Its decline is likely due to habitat loss and lack of appropriate management on the sites on which it is found, leading to a loss of its food plants. Lack of management may also lead to loss or degradation of habitat through over-shading or competition from invasive species such as Himalayan balsam. The Tansy Beetle Action Group was formed to help conserve the population in York.

Tansy beetles and Woodwalton Fen

The rediscovery of tansy beetles at Woodwalton Fen in 2014, after a 40-year absence, was significant as it demonstrates the resilience of the species when given the right conditions. After the draining of Whittlesea Mere in 1851, many species of wildlife were lost. While the beetle initially survived, its isolation was thought to have led to its extinction in Woodwalton in 1973, the date of its last recorded sighting.



The tansy beetle has been found to inhabit not just the ditches on the site, but deep into the fen areas. To avoid disturbing and damaging the habitat, surveys of these areas must be limited, and not every individual beetle can be counted. In York, the population is more linear so potentially every

beetle can be counted without damage. Transects are used at Woodwalton Fen to give a proxy for how many beetles are present on the whole site and to map out their distribution. The areas in which tansy beetles are found are cut later than others to avoid any negative impacts on the species.



Julian Hodgson has been surveying the tansy beetle and its foodplants at Woodwalton Fen since 2017. He could see how little was known about them and volunteered to map out beetles and their food plants. His work has dramatically increased our knowledge of tansy beetle ecology, but we still need to know more in order to protect it.

Please contact us if you would like to become a volunteer surveyor!

And finally, if you are not already a member, please consider joining the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire. We work to ensure that our three counties are a better place for wildlife and people, by caring for nature reserves and encouraging people to get to know the nature on their doorstep, like tansy beetles!