

## Help nature: fill this in

If you see any of the animals or plants featured in this survey there are three ways to let Norfolk Wildlife Trust know:

- 1 Complete the form (below) and send it freepost to: Norfolk Wildlife Trust, Coastal Wildlife Survey, FREEPOST ANG20591, Norfolk, NR1 1ZW.
- 2 Submit your record online, visit [www.norfolkwildlifetrust.org.uk/naturalconnections](http://www.norfolkwildlifetrust.org.uk/naturalconnections)
- 3 Telephone Norfolk Wildlife Trust's Wildlife Information Service on 01603 598333 and ask for a survey card to be sent to you.

**Remember** – every record counts. For further help with identification and to view species profiles and photos visit [www.norfolkwildlifetrust.org.uk](http://www.norfolkwildlifetrust.org.uk) You can also email pictures of your finds to [wild@norfolkwildlifetrust.org.uk](mailto:wild@norfolkwildlifetrust.org.uk) and we will confirm your identification.

### NORFOLK WILDLIFE TRUST'S COASTAL WILDLIFE SURVEY



#### HARBOUR PORPOISE

Date seen: .....

Where did you see it?: .....

Nearest town/village: .....

Grid ref. if known: .....

#### GRAYLING BUTTERFLY

Date seen: .....

Where did you see it?: .....

Nearest town/village: .....

Grid ref. if known: .....

#### YELLOW HORNED-POPPY

Date seen: .....

Where did you see it?: .....

Nearest town/village: .....

Grid ref. if known: .....

#### SEA-HOLLY

Date seen: .....

Where did you see it?: .....

Nearest town/village: .....

Grid ref. if known: .....

#### SLIPPER LIMPET

Date seen: .....

Where did you see it?: .....

Nearest town/village: .....

Grid ref. if known: .....

#### YOUR DETAILS

Name: .....

Telephone no: .....

Email: .....

Norfolk Wildlife Trust may pass your record to the Norfolk Biodiversity Information Service or a county recorder. If you do not want us to do this please tick here.

# Seen a porpoise or a poppy? Tell us!

Gemma Walker on how you can be part of looking after the wildlife of the coast with a special new survey

**W**ild salt marshes, beautiful sandy beaches, strangely sculpted sandy cliffs, squidgy muddy creeks and crunchy shingle with patterned flints are all just part of the attraction of Norfolk's coastline. Our coast is also home to some amazing plants and animals. This summer Norfolk Wildlife Trust is asking visitors to the coast to get involved in coastal wildlife conservation by taking part in a simple wildlife survey. If you go down to the coast keep your eyes peeled for these five animals and plants, and if you see any of them please let NWT know by post or online.

#### GRAYLING BUTTERFLY

Not easy to spot as it's so well camouflaged! If you see a largish grey-brown butterfly that seems to vanish when it lands, holds its wings closed when settled, and has intricate patterns of grey, brown and orange on its wings you may have found a grayling.

**ID Tip:** Look for its silver-grey underside which has a lighter grey zig-zag mark crossing the hind-wing. It is visible when the butterfly is sitting with wings closed.

**Did you know:** When a grayling lands it often tilts its wings sideways to avoid casting a shadow.

**Why record:** Grayling numbers have declined dramatically making it a species of high conservation concern.

#### HARBOUR PORPOISE

Harbour porpoises are the smallest and probably the commonest cetaceans in the UK, only reaching a maximum length of 2m. It can be very difficult to be certain of identification if sighting is distant and brief.

**ID Tip:** When sighted in the water, they often only show a small proportion of their back and their small triangular dorsal fin, which is positioned in the centre of their back.

**Did you know:** 'Porpoising' is used to describe the way cetaceans jump out of the water as they travel; however, porpoises themselves rarely display this behaviour.

**Why record:** To help find out more about the distribution of this elusive creature as little is known about their occurrence around the Norfolk coast.

#### YELLOW HORNED-POPPY

This coastal plant favours shingle, however it may be found growing on sand and cliff tops. All parts of this plant are poisonous. The crinkled grey-green leaves are often visible all



Clockwise from top: Harbour porpoise (Marine Conservation Society); Slipper limpet (Paul Naylor) Sea-holly (David North); Yellow horned-poppy (David North) and Grayling butterfly (Bob Ward)

year and the extraordinary long, thin, usually curved seed pods up to 25cms long are unique to this plant.

**ID Tip:** Look for bright yellow poppy-like flowers from June to November. Usually several plants will be growing close together.

**Did you know:** The yellow horned-poppy takes its name from its horn-shaped seed pods.

**Why record:** Nationally this plant is uncommon and Norfolk is one of its strongholds. We want to find out if its distribution has changed since previous surveys.

#### SEA-HOLLY

Sea-holly is an attractive and distinctive plant confined to the coast and usually growing in sandy areas.

**ID Tip:** Look for the very prickly holly-shaped leaves and in July and August the attractive metallic-purple-blue flowers. No other plant has this combination of very spiky silver to grey-green leaves and purple-blue flowers.

**Did you know:** From 16th to 19th Century candied sea-holly roots were sold as an aphrodisiac.

**Why record:** Sea-holly is thought to be declining in Norfolk and sea-level rise and erosion of sand dunes may be a threat to this species.

#### SLIPPER LIMPET

The slipper limpet is native to North America but was accidentally introduced to Britain by the oyster trade. It is the only limpet species where several individuals live glued together forming 'nested' towers.

**ID Tip:** Oval shell up to 5cm in length. The shell may be white, yellow, cream or pinkish with streaks of red and brown. When washed up on the beach look for two or more shells stuck together in a curved column.

**Did you know:** Slipper limpets may form curved chains of up to 12 individuals.

**Why record:** This survey will help us map the distribution of this non-native animal along the Norfolk coast and help discover how widespread it has become.

*Gemma Walker is wildlife and community officer for the Norfolk Wildlife Trust*

# An alien invasion

Invasive non-native species are considered one of the greatest threats to biodiversity worldwide and are having an effect on the coast says **Mike Sutton-Croft**

**G**lobally, damage caused by invasive alien species amounts to almost 5% of the world economy. In Britain it has been estimated that they cost the economy several billion pounds. To help address these issues, the Norfolk Biodiversity Partnership launched the non-native species initiative in September, which aims to promote and guide the control of invasive alien species in Norfolk.

The Norfolk Coast is an area rich in native biodiversity. However, it has not escaped the insidious invasion of alien species. Many of these species were introduced as ornamental plants in Victorian times, with little consideration as to their potential impacts on the wider environment. One such plant, Japanese knotweed, can add tens of thousands of pounds to the cost of developing a site. If the plant is not adequately removed, then it can cause damage to buildings and other hard structures; the plant has frequently been observed growing through tarmac! The cost of eradicating Japanese knotweed nationally has recently been estimated to be £1.56 billion. Invasive animals are also having significant impacts. Populations of the native water vole have plummeted over recent decades. Much of this reduction in population size has been attributed to predation by the American mink, which was introduced to Britain to farm for fur in the 1920s.

Things are not likely to get any easier in the future. Increased global trade and travel mean that non-native species are being introduced at an unprecedented rate. Climate change will also have an effect; it is expected that some non-native species already living in Britain, which have not been problematic in the past, will expand their

ranges and becoming increasingly dominant. This makes it even more essential that we be pro-active in managing and monitoring non-native species in the future.

There are several ways that you can help prevent the further spread of invasive alien species. The most straightforward way is to choose native plants for your pond. Also, if you are clearing weeds out of your pond, then do not dispose of them in the wild (even if the plants in your pond are native, invasive alien species could have been carried into the pond on waterfowl and will 'hitchhike' into the wider environment). You can also help by taking part in the upcoming Natural Connections survey of invasive non-native species being run by the Norfolk Wildlife Trust (visit [www.norfolkwildlifetrust.org.uk/naturalconnections](http://www.norfolkwildlifetrust.org.uk/naturalconnections)).

The non-native species initiative is also holding a 'day of action' across the county on July 5. Groups of volunteers will be working at sites throughout Norfolk, cutting, pulling and digging to help remove these invaders from the worst affected sites. For more information on the event, invasive non-native species and the work of the Norfolk non-native species initiative, please visit [www.norfolkbiodiversity.org/nonnativespecies](http://www.norfolkbiodiversity.org/nonnativespecies) or e-mail me – [michael.sutton-croft@norfolk.gov.uk](mailto:michael.sutton-croft@norfolk.gov.uk).

**Mike Sutton-Croft is Norfolk non-native species initiative coordinator, Norfolk Biodiversity Partnership. The initiative is backed by Natural England, Broads Authority, Norfolk County Council, Environment Agency and the Water Management Alliance.**

## THREE OF THE WORST

All three species below are either already found in the Norfolk Coast area or on the border and likely to move into the area in the near future.



Olaf Booy

**Giant hogweed *Heracleum mantegazzianum*** – Native to the Caucasus mountains, this plant looks similar to native hogweed but can grow up to 5 metres in height. It was introduced to Britain in 1893 as an ornamental plant and escaped into the wild shortly after. The plant forms dense colonies that suppress the growth of native plants and is covered in small hairs containing poisonous sap that causes painful blistering and severe skin irritation.

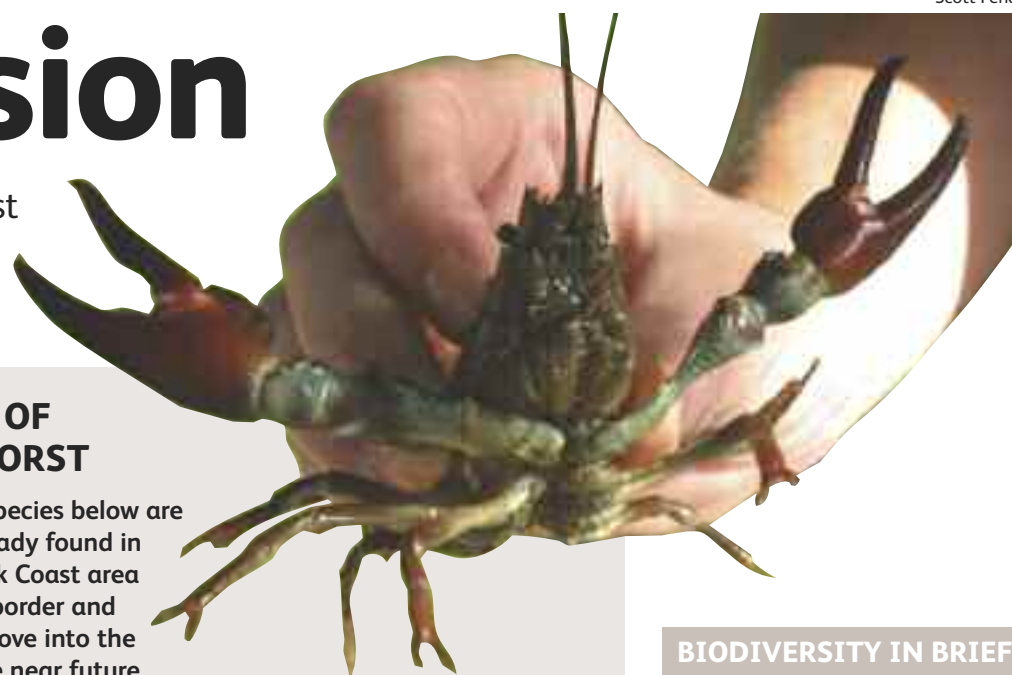
**Australian swamp stonecrop *Crassula helmsii*** – Australian swamp stonecrop was first introduced to Britain in 1911 from Tasmania as an oxygenating pond plant. The plant grows throughout the year and if left unchecked forms a dense mat of vegetation, choking out native plants and making the habitat unsuitable for invertebrates and fish. This species is extremely difficult to control. Mechanical control is almost impossible as tiny fragments produced by cutting and tearing can re-grow, making the infestation even worse. Herbicides are effective but are costly and cause considerable damage to other species.



Keith Luxford

**North American signal crayfish *Pacifastacus leniusculus*** (pictured above) – The signal crayfish was introduced to Britain for food in the late 1970s and early 1980s. Similar in appearance to a small lobster, this species has pushed populations of our native white-clawed crayfish to the brink of extinction in many areas. It carries a fungal disease called crayfish plague which is fatal to the white-clawed crayfish but has no effect on the American signal crayfish.

There is a growing consensus that the only effective way to conserve the white-clawed crayfish is to move it to, or preserve it in, 'ark' sites and prevent the introduction of signal crayfish to these areas. The abundant chalk stream habitats found in the Norfolk Coast area are considered to be ideal candidate areas for the preservation of the white-clawed crayfish.



Scott Perkin

## BIODIVERSITY IN BRIEF

### Bee joins the spots

Thrilling news came in last summer of a rare 'cuckoo' bumblebee sighted at Dersingham Bog National Nature Reserve.

Senior reserve manager Ash Murray, of Natural England, spotted the red-tailed cuckoo bumblebee (*Bombus rupestris*) amongst a colony of more common red-tailed bumblebees and reported his find to the Norfolk Biodiversity Information Service (NBIS).

It was just one of the many pieces of information that the service receives as it works to collect, manage and interpret wildlife data, providing a biodiversity information service for Norfolk. With their species and habitat databases and comprehensive hi-tech mapping capability, the service operates through a partnership of organisations and is hosted by Norfolk County Council.

NBIS Biological Records Officer Pat Lorber was delighted with the bumblebee record as this species has been seen very infrequently in Norfolk in recent times. The queen cuckoo bumblebee kills the queen of the host bumblebee nest, depositing her own eggs there instead, which are tended by the host worker bees.

Although abundant in Victorian times, like many other bumblebee species pressures from intensive agriculture have led to wholesale declines over the past 70 years. Habitat restoration at Dersingham, thanks to many volunteers, has re-established large areas of flower-rich heathland habitat which is good news for all bumblebees.

Find out more about NBIS at [www.nbis.org.uk](http://www.nbis.org.uk)  
*Su Waldron, NBIS*

### Cetacean call

A survey into porpoises, dolphins and whales along the coast is still going on - so keep your eyes peeled when you're looking out to sea or aboard a boat.

Norfolk Biodiversity Partnership are seeking recordings of sightings to give them a better understanding of the status and distribution of marine mammals here, and help plan conservation action. Survey cards are available at the Norfolk Wildlife Trust's Cley centre, the Norfolk Coast Partnership office in Fakenham, or online from [norfolkbiodiversity.org](http://norfolkbiodiversity.org)

## Incredible journey

Like salmon, trout are capable of moving from salt to fresh water. But the sea trout of north Norfolk have all but disappeared from its rivers. **Simon Johnson** explains how things are set to change.



In December 2008 an ambitious project partnership was formed with the aim of seeing this iconic fish return to the Glaven, Stiffkey, and Burn rivers of north Norfolk.

The partnership includes representatives from the Wild Trout Trust, Environment Agency, Natural England and Norfolk Wildlife Trust. But most importantly local interests are really throwing their en-

thusiasm behind the project. These include the River Glaven Conservation Group, Lord Coke of the Holkham Estate, Lord Buxton on the Stiffkey through to individual riparian owners and fishermen.

At this stage there are thought to be two major factors limiting sea trout populations in north Norfolk Rivers: barriers to migration and habitat quality. Barriers include tidal sluices, mills and weirs. On many rivers habitat is in a less than perfect state.

For many decades unsustainable land drainage and maintenance operations have removed many of the

habitat features that wild trout need to fulfil their life cycle requirements. Often this habitat supports a wide range of other species some of which are important in terms of their contribution to local biodiversity.

These include otter, water vole, bullhead, lamprey and native crayfish. The project is also working with Natural England Catchment Sensitive Farming Officers to tackle siltation problems. Excessive amounts of silt can smother gravel shallows used as spawning areas, which in-turn leads to poor survival of juvenile trout.

WTT will be the co-ordinating project partner and has produced a draft implementation plan.

Updates at [www.wildtrout.org](http://www.wildtrout.org)

**Simon Johnson is director of the Wild Trout Trust**