



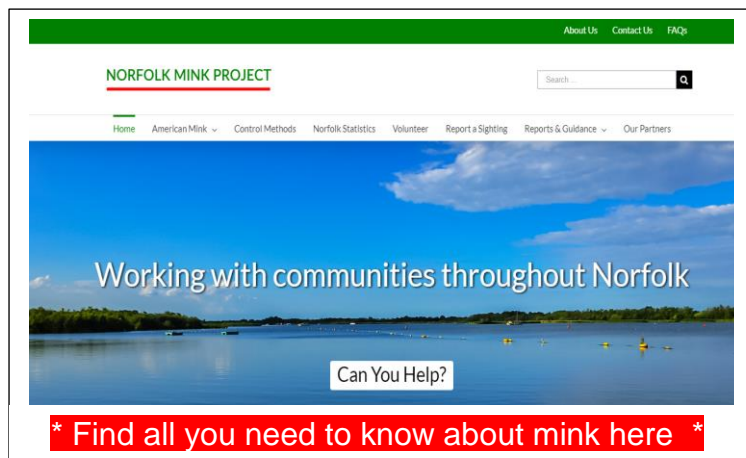
NORFOLK MINK PROJECT

Annual Newsletter 5, January – December 2017

*** Website <https://thenorfolkproject.org.uk/> ***



**Norfolk
Non-native
Species
Initiative**



2017 STATISTICS	
Total Mink Caught	72
Rafts Deployed	422
Traps on Loan	430
Volunteers Involved	288

With all the great support from our volunteers it has been another busy year for the project. A total of 72 mink were caught, which is 22 up on last year but well down on historic levels; for example, 129 were caught in one year on the Wensum alone when trapping started there! There has been a gradual change in the distribution of captures, with numbers now down to low levels in all catchments apart from the two large Broadland catchments of the Bure and the Yare, where the number caught has risen. This is great news for water voles and other susceptible wildlife over much of Norfolk but more still to be done.

TRAPPING SUMMARY

The map below shows all positions where control was carried out during 2017. Now that we are working across the whole county we have a much better idea of the true distribution of mink. We have a trapping density that reflects where most mink are to be found now and have been found in the recent past. Although at the scale of the map, trapping looks very dense in some areas, there are still areas where we would like to do more and also need to replace volunteers who have to drop out.

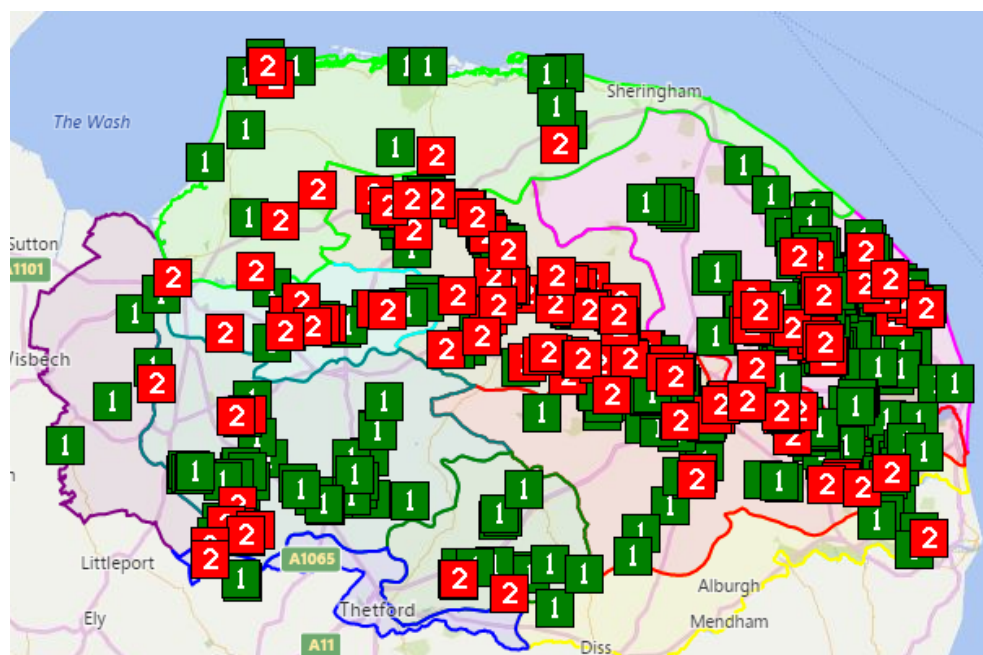
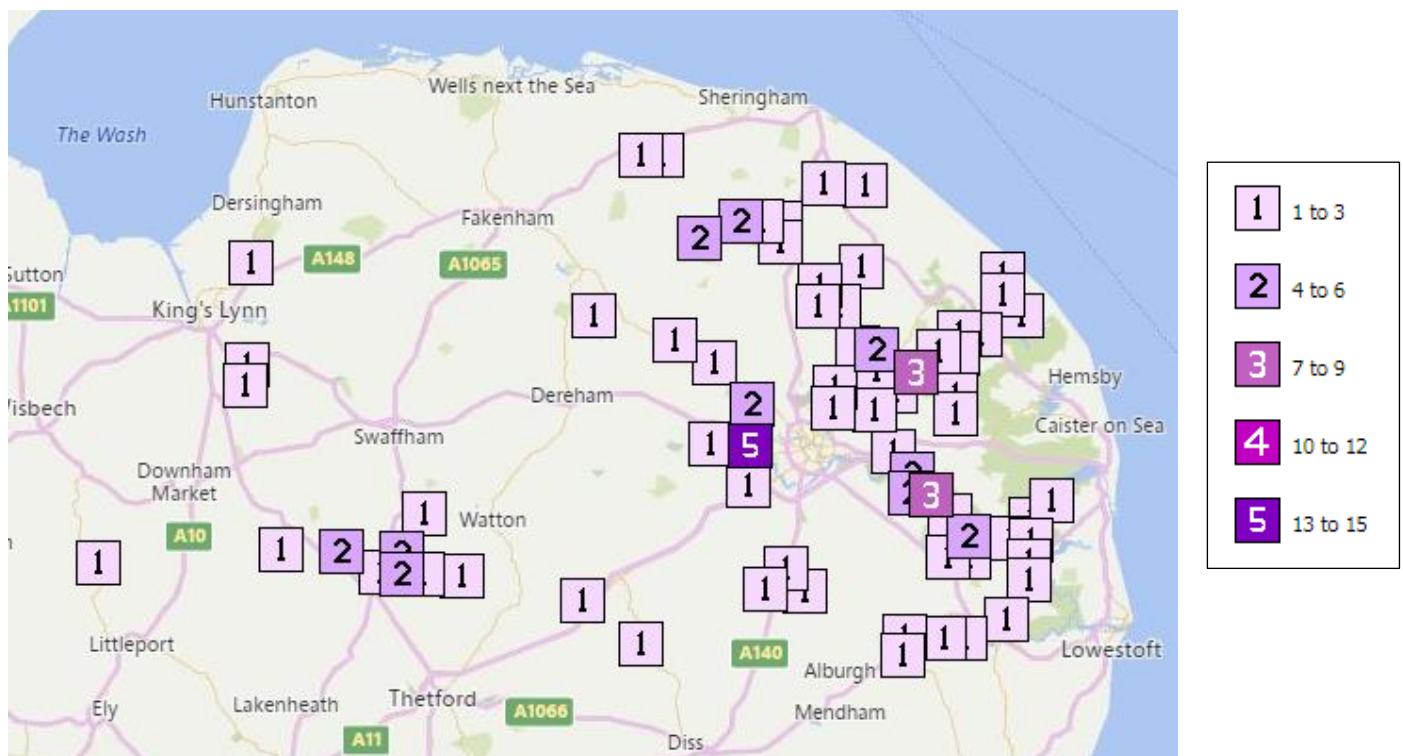


Figure 1
Raft & trap
positions
current in 2017



Figure 2 shows the locations of all captures and other evidence of mink recorded in 2017. Although the different 'events' are not split out in this figure, there is good agreement between sightings and field signs of mink and where they are being caught. This helps confirm that the number caught in each catchment is a good indicator of mink density – most are now to be found in the Bure and Yare catchments.

Figure 2. Number of mink 'events' (captures, sightings, field sign etc.) per tetrad

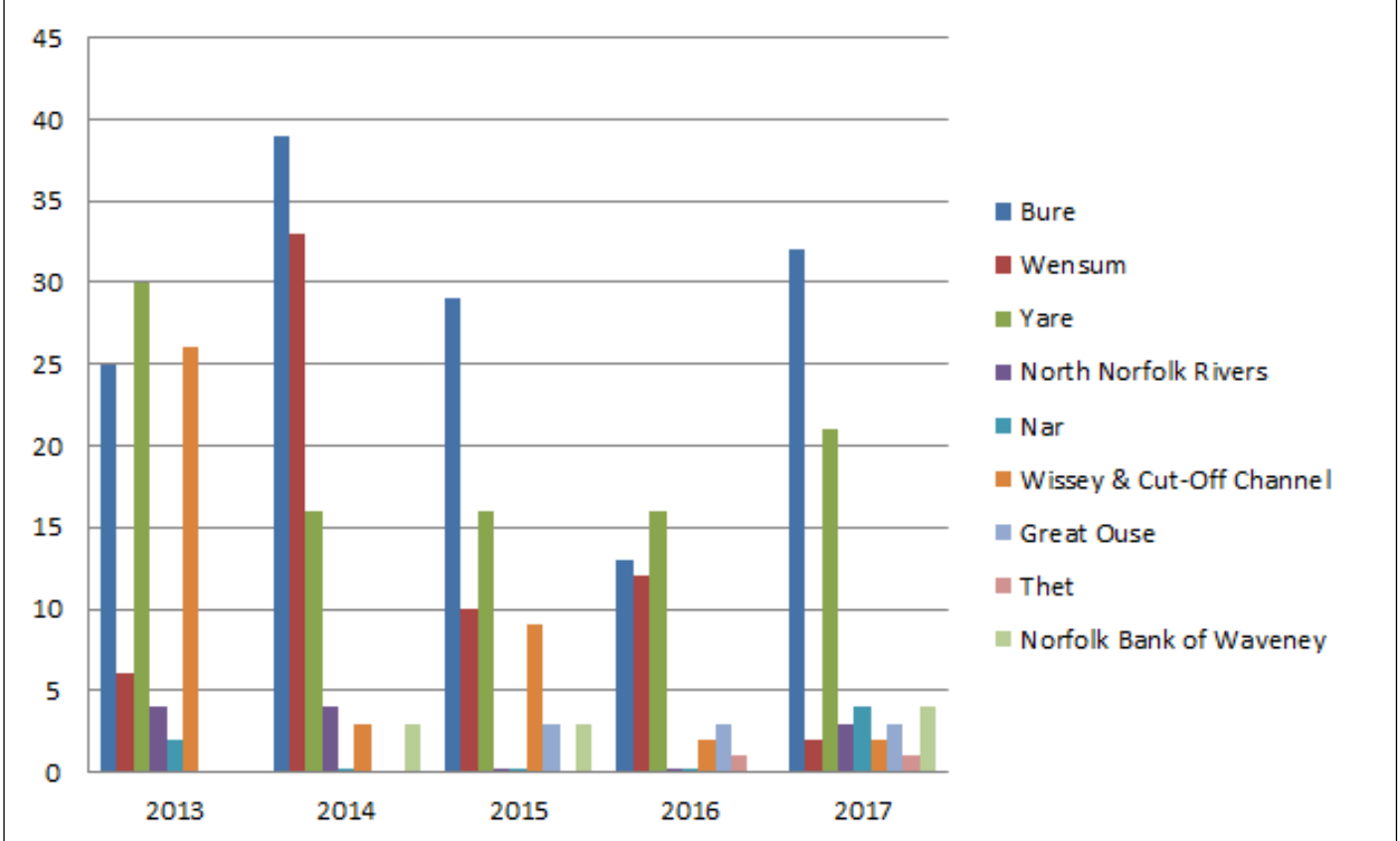


MINK DISTRIBUTION

So why are there still relatively more mink in the Broads than elsewhere in the county? Of course the pattern might change in the future for all sorts of reasons, but a recent paper in the *Journal of Applied Ecology* helps explain why we might expect this distribution now and in the future. The authors looked at the large scale eradication campaign in eastern Scotland and showed that mink are highly mobile, with half dispersing over 60 km away from where they are born and over 20% travelling more than 80 km! The paper also showed that where they dispersed to was dependent on the quality of the habitat. The excellent and extensive habitat of the Broads may well both attract and hold dispersing animals, some of which may have travelled a very long way, possibly between catchments.

Other research carried out recently on mink has shown that the chance of females having a litter and the size of their litters will both increase as the density of females declines. In addition, younger females are more productive and continual culling results in a greater proportion of younger females. The research predicts that the combined effects on areas that have been culled could lead to an average of over 2 additional young per female in the controlled area. The extensive habitats of the Broads are also more difficult to clear mink from than the less extensive riverine habitats of the other catchments. They don't make it easy for us!

Figure 3. Number of mink taken per catchment by year



Although some aspects of mink biology make control more challenging, others work in our favour. For example, mink continually moving into the ‘best’ areas for them means we know from experience where to concentrate our efforts and is why we continually trap mink at some key locations. Greater movement also means more chance of mink being detected and encountering a trap. We are also constantly improving trapping, finding new recruits and continually learning more about the best sites to monitor and trap in. Technology is also helping. We are making greater use of the ‘Mink Police’ that we discussed in an earlier Newsletter, which are turning out to be a very valuable addition to our toolkit. We are also receiving more information on mink sightings from the public, through reports via our increasingly popular website.

As we try to understand what is going on there will also be chance events muddying the water, such as missing a couple of pregnant mink and finding 12 more next year! But we have had, and are having a big impact on mink numbers and water voles seem to be returning to places where they have not been seen for some time.

CATCHMENT REPORTS FROM OUR CO-ORDINATORS

BURE, YARE & THET

Stephen Mace

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MINK CAUGHT & STATUS 2017

Number caught in previous year ()

Bure **32** (13) ●

Yare **21** (16) ●

Thet **1** (1) ●

Bure

The number of captures and sightings has risen for 2017 compared to 2016, with numbers caught more than doubling. Once again numbers were fairly spread out but multiple mink were caught either in the same trap or in a local area e.g. five at Horning and seven in the Buxton, Lamas and Oxnead area. Even with the increased numbers for 2017 the Bure is running well, more people have joined in key areas, which is one reason the numbers are up; a larger net effectively. More coverage between Wroxham and Aylsham along the Bure would be good as there are gaps where females with young mink can thrive. Equally north and northwest of Aylsham could do with a bit more coverage, such as in the Saxthorpe and Hanworth area.



*Mink photographed on the Bure
at Horstead*
© Dinah Groom

Yare

Captures are slightly up on the previous two years and once again upstream from Norwich has been very active, with seven caught at Bawburgh alone. Some website reports came in along the River Tas but unfortunately no mink were caught and they seemed to move on very quickly.

Thet

I am pleased to say that things are very quiet in the Thet, with just one mink caught, which was at Shropham. However, since the catchment is relatively new to the project and the monitoring is fairly sparse I would urge people to keep vigilant and check their rafts as much as possible. The Thet has some very good habitat and a decent water vole population from what I have seen, which could lead to mink thriving if a population gets hold. If you might know anyone who may be interested in joining the project please contact me or pass on my details as I am still looking for new areas to monitor.




NORTH NORFOLK RIVERS GT. OUSE & NAR

Rory Hart

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MINK KILL & STATUS 2017

Number caught in previous year ()

North Norfolk	3 (0)	
Great Ouse	3 (3)	
Nar	4 (0)	

North Norfolk Rivers

Volunteers continue to operate across the catchments with occasional sightings indicating that mink persist in the area but as a dispersed population that are easily overlooked. The only captures reported have been 3 from the Babbingley. There has also been a recent scatter of reports from the Thornage area, at the mouth of the Stiffkey and on the lower

reaches of the Babbingley. Volunteers in these locations have been contacted to raise awareness and new volunteers, particularly close to the report locations, have been recruited. It is pleasing to note that several volunteers report the presence of water voles on their 'patch' in some cases even in places close to where a report of mink has been received. The project is keen to recruit more volunteers to help monitor for and catch mink in the area especially on the Glaven, Ingol and Babbingley. It is also very helpful to hear from current volunteers about what they are finding even if it is only to say that they have 'no mink activity' to report.

Great Ouse

This large river has many miles of habitat suitable to mink and is less accessible than other areas. Reports of mink in the catchment have been sporadic with most activity around Welney. Volunteers in the area have persisted with both monitoring and trapping leading to success early in the year catching 3 animals within days of each other. Since this time no further reports have come in and water vole numbers are stable indicating the effectiveness of diligent trapping effort. There are a number of mineral quarries close to the main river or tributaries where there are excellent places for mink to thrive. The project is anxious to expand the density of traps in the area and would particularly welcome enquiries from any of the quarrying firms who work locally. We are especially grateful to the staff of the water management alliance for the assistance and co-operation they provide in the control of mink in this area.

Nar

The highlight of the 2017 mink control year in this catchment has been the removal of 4 mink from gravel workings at Blackborough. The site has a number of organisations using the reinstated pits for recreational activities including a fishery and game shoot. A report of a mink found dead on the road prompted liaison with the quarrying firm who have been most supportive of the project. Volunteers put project equipment in place and caught their mink within a week. We continue to work with the company and hope to expand the number of sites locally being monitored for mink as well as raise the density of trap/monitoring points on the site. It is likely that neighbouring holdings will also have mink especially where there are marshes, water courses or other wetland habitats.

As with other catchments, reports of evidence of otter continue to occur. There is some similarity between mink and otter, however, the two species can frequently be identified allowing legal and effective management plans to be put in place. The project is always grateful for any information regarding mink or otter that you see or hear about.

WENSUM AND WISSEY

Paul Gambling

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MINK KILL & STATUS 2017

Number caught in previous year ()

Wensum **2** (12)



Wissey **2** (2)



Wensum

The past year has seen a dramatic fall in mink numbers compared with previous years, and particularly compared with last year's sudden increase. Signs of mink in 2017 have been very rare at key points on the Wensum where mink have been detected and caught in large numbers before.

In the upper reaches, from the Raynhams to North Elmham, this almost certainly reflects a real decline in numbers. However, far fewer people are monitoring and trapping in other areas, particularly the tributaries such as the Tud, Wendling Brook and Whitewater. So it is hard to know whether or not the low numbers detected on the mid to lower reaches and tributaries are real, or reflect the less widespread monitoring. There has been a steady but small trickle into the Wensum catchment in the past, since mink are capable of travelling long distances and it is hoped we can restore some of the lost monitoring to see if this is still the case. So, if you are interested in resuming, please contact me.

Wissey

A few mink have been detected at Hilgay, Methwold, Didlington, Mundford and the military training ground at STANTA. Signs of mink have been infrequent and very sporadic, and only two have been caught, both between Didlington and Mundford. It is assumed that there is still a slow influx on the lower reaches, most likely making their way in from the River Great Ouse, but monitoring data is sparse for this area. The upper reaches above Bodney appear to be still mink free and by blocking their potential progress upstream we hope to keep it that way. We have a limited number of trappers and monitors at present, so any extra on the lower reaches and on the Cut-off Channel would be gratefully received.

WAVENEY AND LITTLE OUSE

Penny Hemphill

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&

Stephen Mace (Norfolk bank of Waveney)

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MINK KILL & STATUS 2017

Number caught in previous year ()

Waveney

18 (10)



Little Ouse

13 (11)



Control of mink along most of the River Waveney and the Little Ouse is carried out by the Suffolk Wildlife Trust working in collaboration with the Norfolk Mink Project. Close co-operation between neighbouring counties is essential and this section reports on mink trapped on both sides of the county boundary.

Waveney

In Suffolk 14 were caught, which was a modest increase on last year, with captures spread between Aldeby and Earsham. Aldeby was the most productive area with 6 caught by one volunteer. We had nothing upstream of Earsham, which may reflect the loss of a key trapper last year.

There has been a bit more activity on the Norfolk bank of the Waveney in 2017. Four were killed in total, one trap capture at Haddiscoe, one road kill on the Haddiscoe Dam and two more road kills at Bungay. I (Stephen) have also had more sightings reported between Beccles and Bungay along the main River. If you know anyone along the Norfolk side of the Waveney who might be interested in joining please pass on my details or contact me.

Little Ouse

The relatively low number taken on the Little Ouse indicates that we are succeeding in holding the population at a lower level with more now being caught further upstream. This may indicate catching mink moving into the catchment from outside the project area.

A FOCUS ON PARTNERS

This year we focus on the long term support we have had from The Water Management Alliance.

The Water Management Alliance (WMA) has been a partner in the Norfolk Mink Project since its inception in 2003. Since then, Norfolk Rivers Internal Drainage Board, Kings Lynn Internal Drainage Board, and the Broads Internal Drainage Board have all contributed financially to the project, integrating it into their Biodiversity Action Plans to conserve and protect the water vole, a priority species. These Internal Drainage Boards are the competent authorities managing water levels and watercourses throughout many of the SSSI and European protected sites within Norfolk.

This project has been extremely popular with our rate payers and Board members, as it contributes multiple conservation benefits to Internal Drainage Board (IDB) catchments, not only reducing predation to water voles but also of young game birds, wild fowl and ground nesting birds. The conservation bodies, volunteers and gamekeepers involved in the project are assisting to enhance bird and water vole populations in these unique Special Protection Areas, Special Areas of Conservation and internationally important Wetland Habitats throughout the county.

The WMA has also established and is funding a Mink Project for the newly established Pevensey and Cuckmere Water Level Management Board (P&CWLMB). Mink are a problem in the Sussex IDB catchments and Pevensey Levels Special Areas of Conservation where water voles are currently scarce and ground nesting birds are of significant importance. Our East Suffolk IDB also contributes financially to another successful mink project being delivered in Suffolk via the Suffolk Wildlife Trust.

In October 2017, Simon Baker, Chair of the Norfolk Mink Project, travelled to Pevensey to talk to volunteers and land owners about the successes of the Norfolk Mink Project at the launch of the P&CWLMB Mink Project. It is great to recognise that the successes of the project are spreading to other parts of the UK and the WMA IDB boards are very proud to be part of the ecological successes of the Norfolk Mink Project.



Water Vole
Arvicola amphibius
© Jackie Dent

WATER VOLE NEWS

The water vole, one of the main species this project helps to protect, is the UK's most rapidly declining mammal. We knew that the population had reduced by some 93% by the late 1990's but the decline in range has continued. A recent analysis of distribution data, led by the Wildlife Trusts, indicated a decline of 30% in places where water voles might be found across England and Wales between 2006 and 2015.

The study indicated that despite the overall decline, there might have been a slight increase in distribution in recent years. With effective collaboration between counties in East Anglia we believe that we are at the forefront of that increase, primarily because of our large scale and effective mink control. The picture is unfortunately not so good everywhere; Surrey for instance, has not recorded a single water vole since 2008 and they are considered 'functionally extinct' in the county!

Other news on this species is the development of a test to detect them using environmental DNA (eDNA) analysis. Initial results have shown that the presence of water voles can be reliably detected in both still and flowing water. It is likely that the technique will prove a valuable addition to the toolkit available for projects aiming to monitor and conserve them.

Water voles have also hit the national news recently, with the discovery of thriving populations living along the M8 corridor in the east end of Glasgow without any access to waterways or wetlands. This is similar to many European populations which are equally at home away from water. It is these continental water voles that ours have descended from when the species colonised these islands after the last ice age. If you are interested you can read more at <https://scotlandsnature.blog/2016/02/05/glasgows-water-voles/>. Urban Glasgow will have its dangers for water voles but at least mink are unlikely to be one of them!

AND FINALLY

Together we have achieved another successful year's control. We manage, with your help, to cover the whole of Norfolk on a budget of some £20k per year, which covers the supply of rafts and traps, Co-ordinators time and transport etc. We and our partners believe this is exceptional value and enables a contribution in time from our volunteers valued at some £115,000 each year. However, in the current financial climate some of our partners are finding it challenging to maintain their support. We rely on a range of donations to survive so if you or your business would like to help sponsor the Project we would be extremely grateful. You can find details on the home page of our website. There are also other ways to contribute; we always need sheets of 6 & 9mm Stokbord to build new rafts, so if you have any that you can donate we can always collect them, just contact your co-ordinator.

Challenges aside, The Project is about a great effort by a lot of people coming together to improve the lot for wildlife in Norfolk. A sincere thank you from the Steering Group and Co-ordinators.

Simon Baker

Chair of the Steering Group and editor of the Newsletter

Katy Owen

Lead Partner, Norfolk Non-native Species Initiative, Norfolk County Council

