An introduction to wildlife at Kielder

Why is Kielder a good place for wildlife?
Home to the biggest man-made lake in northern Europe, the largest working forest in England and Europe's largest expanse of protected night sky, Kielder is a spectacular place. The sheer scale of Kielder Water & Forest Park, combined with the wide range of habitats found here, means that there is plenty of space for wildlife – both common and rare.

Habitats include: Coniferous forest, wetlands, broadleaf woodland, marshy grasslands, blanket bogs (Border Mires), wildflower meadows...

When to watch wildlife?
The table below shows the times of year that are best for watching wildlife (dark green) and times when the wildlife is still around to see but perhaps not as active (light green).

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**Red squirrels**

Kielder is home to 50% of the English red squirrel population. They are now very rare in UK. Red squirrels breed early in year and often have 4 kits. They will sometimes have 2 litters if there enough food available.

Kielder Waterside hide provides one of the best opportunities to see them. They can be hard to see in Kielder away from feeder due to low densities (1 animal per hectare) and dense woodland.

Red squirrels are threatened by the introduced grey squirrel which out compete them for food, but more importantly carry the squirrelpox virus, which does not affect greys but is lethal to red squirrels. If you see a grey at Kielder, please report it to Northumberland Wildlife Trust - 0191 2846884. The Red Squirrels Northern England project employs red squirrel rangers working around Kielder Forest.

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**Roe deer**

This is the only deer you species you will see in Kielder. Males have short antlers, while females have none. They are usually a solitary animal but can form small groups. They are a woodland species. They rut mid-July to end August, and give birth following May/June – usually to twins. Often see them from the dam and on the road to Kielder Observatory. Roe deer numbers are controlled by Forestry Commission wildlife rangers at Kielder.
**Water vole**
Reintroduced to Kielder in 2017 by Restoring Ratty project. These little mammals can often be mistaken for a rat – distinguishing features include furry tail, blunt nose and short rounded ears. The major threat to water vole survival is predation by the introduced American Mink.

They largely eat vegetation (227 plant species identified!) but will eat insects, worms etc if they need to. They live in burrow systems and are highly territorial. Females can have up to 5 litters a year, of between 2-8 pups. Male territories are larger and will overlap with several female territories. Signs they are present include latrines of droppings and lawns of chewed grasses.

Restoring Ratty is a 5 year partnership project following on from Kielder Water Vole Heritage project, run by NWT, FC and Tyne Rivers Trust. To find out more, follow the Restoring Ratty facebook page.

**Fox**
The fox is a highly adaptable species found across UK. They are territorial, with a family group occupying a territory. They have a wide and varied diet – rabbits, voles, birds, insects, beetles, fruit... Usually one litter per year of 4-5 cubs, in spring. Regularly seen at Kielder on roadside.

**Badger**
Badgers are another widespread species. They are unusual in the mustelid family (weasels, stoat, polecat etc) in that they live in groups of 2 – 23 adults (usually ~6). They are a nocturnal species and are rarely seen during the day. They live in setts, with a litter of 2-3 cubs born in February. Cubs begin to venture above ground at 8 weeks. Badgers can be found throughout Kielder Forest.

**Otter**
The otter made a huge recovery in Northumberland after dramatic population decline in 1960s and 70s – pollutants, pesticides and poor riparian management to blame. They are semi-aquatic and are closely associated with water courses. Major food items include salmonids, crayfish and frogs. They will occasionally eat birds. Otters cover large ranges. They can give birth at any time of year – usually 2-3 cubs. Otters are seen regularly at Bakethin. Presence of spraint (smells like jasmine tea!) on rocks under bridges is a good sign of their presence.
The pine marten has only recently been discovered at Kielder (2018) and the population is likely to be small. Pine martens are a mustelid (related to otters, badgers, stoats, weasels etc) and are associated closely with woodlands.

They are omnivorous predators that will eat small mammals, birds, frogs, fruit and berries and much more besides. There is a lot of interest around their interactions with red and grey squirrels, with recent studies showing that they will preferentially take grey squirrels (as they are bigger and easier to catch) and which may actually be helping red squirrels in areas where all three species occur. Research is ongoing!

Individuals can be identified by the pattern of their cream coloured bib. They have one litter in March/April of between 1-5 young.

There are at least nine species of bat at Kielder: Pipistrelle, soprano pipistrelle, Natterer’s, brown long eared, Daubenton's, whiskered, Brandt’s, noctule and Leisler’s.

The pipistrelle, the most common British bat, is one of the easiest species to see – abundant around buildings.

Daubenton’s are also easy to see as they hunt insects over the water, picking them off with their feet and tail. They are larger than pipistrelles with a silvery underside.

Brown long-eared bats not only look extraordinary – they have exceptionally sensitive hearing and can hear a ladybird walking on a leaf!
**Osprey**

Ospreys became extinct in UK in 1916 due to persecution and egg collection. They naturally recolonised Scotland in 1954, probably birds from Scandinavia. Birds were seen passing through Kielder and so the FC erected nesting platforms. After a few false starts, the first successful breeding pair happened in 2009. We now have 5 breeding pairs and 58 chicks have so far fledged (end of 2018). 2018 was the 10th successive year of osprey breeding at Kielder.

Ospreys are migratory – our birds spend winter in W Africa (some maybe in southern Europe). They return to Kielder at the end of March / early April.

Kielder Osprey Watch takes place at Kielder Waterside (formerly Leaplish!)
- It is run by NWT volunteers
- Timings get decided early in the year – check NWT website for info. Usually late April – mid August.
- Osprey and Wildlife Cruises with Calvert Trust are a great way to have a chance to see the birds up close.

The Kielder osprey blog is a fantastic way to keep up to date with the ospreys: [www.kielderospreys.wordpress.com](http://www.kielderospreys.wordpress.com)

**Goshawk**

The goshawk is another species that went extinct in UK in 1800s due to persecution. It looks like a sparrowhawk on steroids! Still very rare in UK, but there is a good population at Kielder. This bird is very hard to see as it hunts under the canopy. March is the best time – look for them displaying above the tree line. They will eat rabbits, squirrels, birds, pigeons, waterbirds... they will fly through vegetation and will give chase on foot!

**Crossbill**

Chunky finch with distinctive crossed bill used to extract seeds from conifers. Look like small, brightly coloured parrots. Males are red/orange, females greenish brown and are usually found in family groups or larger flocks. They fly close to the tree tops – look up! They are seen regularly at Bakethin and all around Kielder.

**House martins, swallows, swifts and sand martins**

All common around Kielder in the summer months. House martins and swallow nests can be found on almost any building! These provide a brilliant nature experience for visitors.

Swallow nests have an open cup shape, whereas house martin nests are more enclosed. Sand martins burrow into sandy banks and live in colonies. All 3 of these species can be seen perching on wires.
Swifts nest in holes and crevices in buildings. They are brown with scythe-like wings. They often screech when flying. They do not perch – they even sleep on the wing!

House martins have a glossy blue-black back and head cap, with an all white underside. Swallows are blue with a red chin and deeply forked tail. Sand martins are brown in colour. The white of their undersides is split by a brown band on the breast.

Adder
They are the only venomous snake native to Britain. **They aren’t aggressive!**
Males are silvery with black zig zag, females pale brown with dark brown zig zag. The best time to see adders is early spring when they emerge from hibernation. They shed their skin in April and then mate. They have live young in late August/early September. Adders eat small rodents, frogs, newts, ground nesting birds Seen at Bakethin and Kielder Waterside wildlife garden basking in the sun. Cyclists will often see them on the Lakeside Way.

Salmon
Salmon are closely related to brown trout and can reach 70cm – 1m in length. Because of Kielder dam, salmon can no longer migrate to spawning grounds high up the North Tyne catchment. Salmon centre staff collect adults to breed – up to 900,000 young each year are released back into the Tyne river systems. Tyne is now one of England’s best salmon rivers
Do visit Kielder Salmon Centre to learn more about the amazing life cycle of salmon and also see the freshwater pearl mussel tanks.
Native woodland creation
In the forest edges around Kielder village veteran trees and native woodlands still persist. FC increasing biodiversity and softening the plantation boundaries by planting native tree species. Kielderhead Wildwood project is restoring a native, upland woodland and protecting possibly the last native English Scot’s pine.

See www.nwt.org.uk/wildwood for more details.

Wildflowers
19 miles of roadside verges – more than 100ha in total! The verges act as a continuous ‘highway’ for pollinators – bees, butterflies, insects etc. Red clover, yellow rattle, bird’s foot trefoil and other species can be found. There are a variety of orchids too: northern marsh orchid, common spotted orchid, heath spotted orchid and fragrant orchid can all be found at Kielder (along with other species).

Where to see wildlife?
Wildlife hides – there are 4 wildlife hides around or close to the reservoir:
- Kielder Waterside – best chance to see red squirrels of all the hides, plenty of woodland birds
- Bakethin Hide – new hide (2017) with great views over Bakethin Reservoir. Good for wading birds, herons, cormorants, ducks and occasionally osprey. Otters can be seen at dusk and dawn.
- Kielder Castle hide – in the grounds of the castle – good for squirrels and woodland birds
- ‘Ratty’ hide – about half a mile up the forest drive from Kielder Castle. Hoping to see water voles in the pond below!

If visiting any of the following, here are other things to look out for

Kielder Castle – Bats can be spotted around the castle at dusk and barn owls live close by. There are several bird and squirrel feeding stations here.

Kielder Salmon Centre – The Environment Agency’s visitor centre (open seasonally, free entry) has an interesting exhibition detailing the fascinating life cycle of the Atlantic salmon and the work undertaken in the salmon centre. There is a natural North East river environment aquarium showcasing salmon and other local river species, videos revealing the behind the scenes work at the centre to protect iconic species, a prehistoric salmon fossil dig and a quiz and brass rubbings. See the adult fresh water pearl mussels living in the artificial stream and the trout that are a vital part of their fascinating lifecycle.
Bakethin Nature Reserve – the wildlife pond located on the wild walk to Bakethin Hide is home to a multitude of species including newts, damselflies, dragonflies, toads and frogs. There is a series of brass rubbing plaques of the pond creatures on the rail.

Kielder Waterside – the Beeches Trail has stunning views of Kielder Water with common sightings of native red squirrels and woodland birds. There is a wildlife garden with a raised pond and butterfly shaped bed. Adders, butterflies, stoats and amphibians inhabit the garden.

Kielder Birds of Prey Centre at Kielder Waterside is home to over 60 birds including eagles, owls, falcons, hawks and vultures, as well as a family of wallabies. The entry ticket is valid for the whole day so why not come and have a look round in the morning then return after lunch for the flying demonstrations.

Forest Drive – open from May to December, this is a 12 mile forest drive from Kielder Castle to Blakehopeburnhaugh on the A68. One of England’s highest roads, cresting over 1500 feet, the views are breath-taking. Expect occasional encounters with roe deer at dusk and dawn, feral goats and birds of prey.

Kielder Dam Wall – near to Falstone, the dam holds back over 44thousand million gallons of water and is home to brown and rainbow trout. Oystercatchers are frequently seen from the dam wall, and badgers at dusk.

Belling peninsula – on the north shore visitors often see roe deer, woodpeckers, goshawks, buzzards and if lucky osprey.

The Border Mires comprise 58 sites (10,000ha) around Kielder. Falstone Moss, above Tower Knowe, is most easily accessible. Special plants such as sundew, cranberry, sphagnum moss can be found in the mires. They are also home to a variety of dragonflies and butterflies. Together, the mires hold more water than Kielder reservoir!

Any of the buildings at Kielder are great for bats and birds.

 Everywhere – there’s plenty of wildlife around... Don’t forget to appreciate the common species along with the rarities we have here!

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