Report on a Mammal Watching Trip to **BELARUS**

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In May 2013 I travelled to Belarus to assist Professor Vadim Sidorovich, in his annual search for active wolf dens within the Naliboki Forest, a two hour drive from the capital, Minsk. I had read a bulletin in the Wolves and Humans Foundation http://www.wolvesandhumans.org/ newsletter inviting a volunteer to take part in Vadim's wolf population studies, which he has undertaken each May since 2000, initially under the auspices of the Zoology Institute, but recently, independently.

The Foundation passed on my expression of interest and shortly thereafter Vadim was in contact and arrangements were made for me to obtain the necessary visa and letter of introduction (then required to enter Belarus (which necessitated lengthy visits to their London-based Embassy!). Today, UK citizens (and other nationalities listed) http://www.belarus.by/en/travel/travel-visas can now enter the country for 30 days without a visa, although there are still restrictions concerning tourists crossing into Russia, by road. I arranged flights on Belarus Air and flew direct from London Gatwick to be met by Vadim at Minsk airport. The agro-tourist house where I stayed is in the hamlet of Naust, set in a hectare of land 15km within the forest. It is now the Naust Eco Station https://www.wolfing.info/ which Vadim runs with his zoologist wife, Irina. In 2013 my costs were 60 euros per person per day, to cover food, accommodation and transport. In the intervening years costs have barely risen, certainly for groups. Single visitors pay a small additional premium.



Nakiboki Forest

I have fond memories of my Naliboki experience, especially in being guided by someone so well qualified as Vadim (who is also a very competent and experienced woodsman). I was lucky too, inasmuch as the weather turned dry and warm and it remained so for the duration of my stay. As Naliboki's wolves tend to prefer denning in the most hidden and protected of places, often deep within the swamp forest, being physically fit to manage long days in the field, negotiating difficult and/ or flooded terrain, is important, but I found the rewards justified the occasional discomfort!

Naliboki Overview

Naliboki (or Nalibokskaya Pushcha) is a dense forest area located in the basin of three rivers, the Nioman, in the south, the Islach, in the east and Biarezina in the west. Its borders to the north are less defined and there is a transition area, with more settled areas. Originally, part of the Duchy of Lithuania, in the Middle Ages it was designated a hunting forest and much of it remains so today.

It is said to be the largest remaining area of contiguous semi-natural forest in Belarus. Historically, the land was considered infertile and this, ultimately, has led to its survival. With little farming practiced, the area was given over to timber extraction and smelting for bog iron. Curious piles if small blue rocks can still be seen in the forest, iron slag from former workings. Another common sight is the industrially-crafted remains of stills to produce samahonka or Belarusian moonshine! During the First World War, in the autumn of 1915, Naliboki Forest stood between the German and Russian front lines. Substantial fortifications and trenches from that time can still be seen, as can burial mounds; not the results of battles (no major attrition took place here) but a more insidious enemy; the outbreak of a major typhus epidemic. At that time attacks by wolves became a regular occurrence. So many people died and remain unburied (or poorly buried) that wolves (with their natural prey extirpated by hungry soldiers and villagers) exploited this new food source.

Perhaps up to 25,000 troops and partisan groups, Russian, Polish, Jewish and criminals occupied Naliboki during the Second World War. Atrocities were carried out by all sides in the conflict and evidence of those times is still tangible, for example, faint tracks leading only to a clump of trees, where once stood a thriving local community. The natural and manmade worlds mesh at Naliboki. In the later Soviet era, during the 1960s -1980's, timber extraction became a major threat to the forest and many of the larger swamps were drained and the structure of the ancient forest lost. However, large, newly created, dry meadows (which give a surprising open aspect to some areas of Naliboki) were not well maintained and beavers subsequently moved into the canals and reengineered them, effectively recreating the marshes that man's activities had sought to supplant.

In 1986 a different threat materialised when the Chernobyl nuclear accident caused a high fall-out of radiation onto parts of Naliboki (two 'hot spots' remain). Avoid eating berries and mushrooms... The forest today remains largely intact and its human population, relatively small. One senses that our past incursions are being slowly erased with each successive Spring growth. Naliboki remains of critical importance to nature conservation. Some 60 mammal species are represented here: thirteen species of carnivore (with all naturally occurring apex predators) six wild ungulates, 31 non-predatory medium and small sized mammals and up to thirteen species of bat (together with 200 bird species, eleven amphibians, seven reptiles species and 40 species of freshwater fish). The flora comprises nearly 1000 species, yet only the core area of Naliboki has some formal protection.





Naust Eco Station



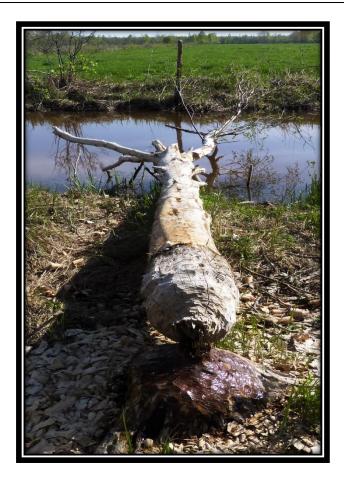
Naliboki Swamp Forest

The trip from Minsk on a wintry, rainy day, along the brand new motorway connecting Belarus to Lithuania had seemed like witnessing yesterday's Europe. Forests, ragged fields and insects hitting the windscreen; scarcely a settlement to be seen and little traffic, bar Vadim's own ancient Range Rover, which he had purchased and driven over from England years previously. Taking the turning to Naliboki, the road became a lane and then a track. Approaching the hamlet of Naust, we were stopped. Beaver burrowing had caused what passed for a roadway to subside and it took some time to repair the damage, utilising logs, trunks and stones to enable us to complete our journey.

Welcome to Naliboki! Having quickly dropped off our kit, we went out to explore the forest. Even with only a passing interest in ornithology, the species list here provides an important indicator of the wealth of this largely undisturbed habitat (or, in the case of Naliboki, a series of different specialised habitats, interwoven within it). When the first species seen is a Western Capercaillie (Tetrao urogallus) followed next by Hazel Grouse (Tetrastes bonasia) Common Crane (Grus grus) and then a Corncrake (Crex crex) scuttling across the track, with Great Snipe (Gallinago media) and Spotted Crake (Porzana porzana) calling close by, those indications are clearly confirmed! A fact reinforced when we found a Lesser Spotted Eagle (Clanga pomarina) (one of the 22 species of raptor recorded within Naliboki) perched alongside the track close to the house. A European Roe Deer (Capreolus capreolus) was the first of twenty mammal species we would see during this trip. And, as we stopped close to our earlier impromptu road repair, my first sighting of a European Beaver (Castor fiber) swimming in a small pool, before clambering up onto the bank alongside us. Beavers were not exterminated from Naliboki, as elsewhere in Belarus, despite the high level of hunting. Today, there are perhaps 5,000 -7000 beaver settlements, 4,000 active beaver ponds, 2,000 - 3,000 ponds no longer occupied and an estimated population of 20,000 - 40,000 animals.



European Beaver (Castor fiber)



Beaver Engineering



Beaver Dam



Wild Boar in the Mist

A misty start, but it heralded a change in the weather. It became warm. Albeit, the arrival of Spring heralded also a mass hatching of millions of Mosquitos! Across a patch of open ground we spotted our first (and only) Wild Boar (Sus scrofa) of the trip. Although we found several bloated carcasses in the water channels, victims of a long-lasting and particularly snowy Belarusian winter (which also reduced substantially numbers of Roe Deer (yesterday's Roe, a fortunate survivor). Also seen today our first Elk (Alces alces) and, separately, two Red Deer (Cervus elaphus). These two species once showed marked habitat differences within Naliboki, but with forest clearances from the 1960s Elk progressively took advantage of the many clear cut areas. However, in the Summer season Elk still tend to revert to the swampier habitats. In the early 2000s there was thought to be around 1,000 animals in Nakiboki (and some 2,000 Red Deer). In the morning we also had our first evidence of Wolf (Canis lupus) with discovery of two sets of tracks, one female, which Vadim said was pregnant, and another with tracks of a European Badger (Meles meles).



Badger and Wolf Tracks



Female Wolf Track



Young Elk (Alces alces)

Some nice birds recorded this morning, included Eurasian Nightjar (Caprimulgus europaeus) Black Grouse (Tetrao tetrix) a calling Eurasian Bittern (Botaurus stellaris) (40-60 pairs breed here) Thrush Nightingale (Luscinia luscinia) lekking Capercaillie (a first for me) more Eurasian Cuckoos (Cuculus canorus) than I've ever seen in a single locality and, sitting by a beautiful stretch of river for lunch, a small flock of a locally rare Summer visitor, Hawfinch (Coccothraustes coccothraustes). Reptiles and amphibians were well represented as well, from the amplexus of Common Frogs (Rana temporaria) which contrasted strongly with a single venerable-looking Common Toad (Bufo bufo) a Grass Snake (Natrix natrix) and my first European Fire-bellied Toad (Bombina bombina).

Driving back to Naust and entering one of the large open meadow areas I noticed an animal on the road in the distance. I said, 'there's an animal on the road' (but, instinctively I already knew what it was). Vadim, who was driving and talking to his friend, who had also joined us, didn't hear me. So, louder this time, I practically shouted, 'there's a wolf on the road!' Vadim leant forward, his nose almost touching the windscreen. Fully focused! Down went the accelerator and we were headed off toward it, at great speed. It was important to identify correctly the animal in question. As we closed on its position the wolf ducked into a ditch (which was water filled) and climbed the opposite bank. As we drew alongside Vadim immediately identified it as a yearling. One of six, but all its siblings had either starved to death or been killed. Longevity in wolves here is not very high.

Seeing a wild **Wolf** was a life-long wish fulfilled, but as *this* wolf reached the safety of the tree line only then to turn and look back at us, my feeling of elation was also tempered by knowledge of the huge obstacles to survival wolves face here, not solely the human threat. Since my visit the wolf population has plateaued. Partly, this may be explained by an increase in the number of two other apex predators and the complicated interplay existing between these three species. **Brown Bear** (*Ursus arctos*) was a very rare animal when I came to Naliboki in 2013. Now, a dozen frequent the area, and these may compete with wolves over their kills and carrion. Meanwhile, **Northern lynx** (*Lynx lynx lynx*) numbers have increased to 60 – 90. Whilst adult wolves will eat **Lynx**, given the chance, the latter are adept at locating dens and eating wolf cubs. The wolf's main natural enemy.



Yearling (dripping water from its enforced swim)

DAY 3



Dawn on the Vol'kar River

A quieter day today. One new mammal, namely, a **Red Fox** (*Vulpes vulpes*). Foxes are common in Naliboki and have a very catholic diet, but they face a high rate of attrition themselves, falling prey to large raptors, **wolves** and, especially **Lynx**. Highlight today was a beautiful **Adder** (*Vipera berus*).



Adder (Vipera berus)

Up early and out to again search for active wolf dens. Working on a rough average, Vadim is able to locate one active den every ten days. That is an impressive record given how hard they are to find and the nature of the terrain. We walked deep into the forest, making impromptu bridges with half-rotten logs, to access likely sites across the many watercourses and negotiated (gingerly) the mass of broken limbs that denote tree fall areas, a favoured, secure site for wolves to den. We did ultimately find a den, but it had been disturbed, possibly by people, or simply the cubs were quite advanced and scattered when they heard our approach. However, I sensed, success was getting closer. Unfortunately, I missed my step whilst clambering through a submerged section and gashed my leg. Swiftly treated in a local village, I sat out the rest of the afternoon, perched on top of a hillock, within which the buried remains of a German WW1 Command and Control bunker.



Wolf den in tree fall forest

A mammal earlier in the day was one I hadn't expected to see, given the forested habitat, namely **Mountain Hare** (*Lepus timidus*). Populations are lower than previously recorded. A recent crash in the vole population has meant a change of diet for **Foxes** and **Racoon Dogs**, which Vadim believes have turned to young **hares** as a favoured substitute. Of note, **Wolves** and **Lynx** take adult hares, but their preference is larger game, **Wild Boar** and **Roe Deer**. Another animal seen today was **Northern White-breasted Hedgehog** (*Erinaceus roumanicus*) hunting actively around the hamlet.

Montagu's Harrier (*Circus pygargus*) was yet another unexpected sighting today, as it is a rare breeding bird, represented here with a handful of pairs only. A **Eurasian Woodcock** (*Scolopax rusticola*) ambling across the road, in full daylight, together with lekking **Black Grouse** was a very nice way to end the day. Except, one more mammal was to show this evening, a **Parti-coloured Bat** (*Vespertilio murinus*) feasting, presumably, on **Mosquitoes**, whose numbers were now so high that the hum of millions of tiny wings on a clear, still night was not only audible, but impressive.

Days 5 - 7

Pre-dawn and a smaller bat circled around the house as I got ready for the day, a **Nathusius' Pipistrelle** (*Pipistrellus nathusii*) a long distance migrant and one of the commoner bats in Naliboki.

Once we set off, we had gone no further than 200 metres (to the site of our original road repair, and the **Beaver** and **Lesser Spotted Eagle** spot on Day 1) than a rarely sighted **European Polecat** (*Mustela putorius*) ran across the track, giving brief, but good views. The **Polecat** populations had fallen substantially by the mid-2000s here due to competition from non-native **American Mink** (*Neovison vison*) which decimated a major food source, **Water Vole** (*Arvicola amphibious*) and **Racoon Dog** (*Nyctereutes procyonoides* outcompeting **Polecat** for carrion. However, both these alien populations has fallen (**Mink** due to disease and **Racoon Dogs** due to increased predation by **Lynx** and **Wolf**, in the absence of other prey following cold winters), so the **Polecat** has recovered.

Returning to the house I had a visitor, in the form of a **Barn Swallow** (*Hirundo rustica*) that I helped escape back outside. Unfortunately, W**asps** had also taken up residence, hastening my own move.



Barn Swallow (*Hirundo rustica*)

Over the next couple of days we continued to search for active dens. In vain. I think Vadim was beginning to worry that I wouldn't be lucky, after all. However, I was more than content with all that I'd observed and something new could always be just around the next corner. On the morning of Day 7, we drove up a small hill, at the crest of which a **Pine Marten** (*Martes martes*) darted around the trunk of a tree, before it then climbed rapidly into the higher branches. Analysis of **Pine Marten** feeding preferences here has shown it to prey on small rodents and birds for half its food intake, but that vegetable matter, particularly fruit, accounts for the other 50% of its diet.

Success! Not one set of **Wolf** cubs, but two. A series of excavations (perhaps an old, but enlarged **Badger** sett) revealed the amazing sight of several four week old pups, together with two week old pups, in the same den. Moreover, a **Fox** cub was excavated from a third den, only a little distance away; half the size and twice as feisty as any of the wolves. It appeared that two, closely related wolves, presumably sisters, may both have bred and either had mixed the pups together, it being in the mother's nature to transfer young periodically, or that the mother had heard us approach one den and had chosen to secure, quickly, her brood in with her (likely) sister. Whatever the explanation, these gentle, blue-eyed youngsters were extraordinary. As Vadim prepared to take DNA samples from the cubs I had my hands full preventing their escape into the undergrowth. Within a short time, the scientific work complete, the pups were returned to the den and we left.



Two Week Old Wolf Pup



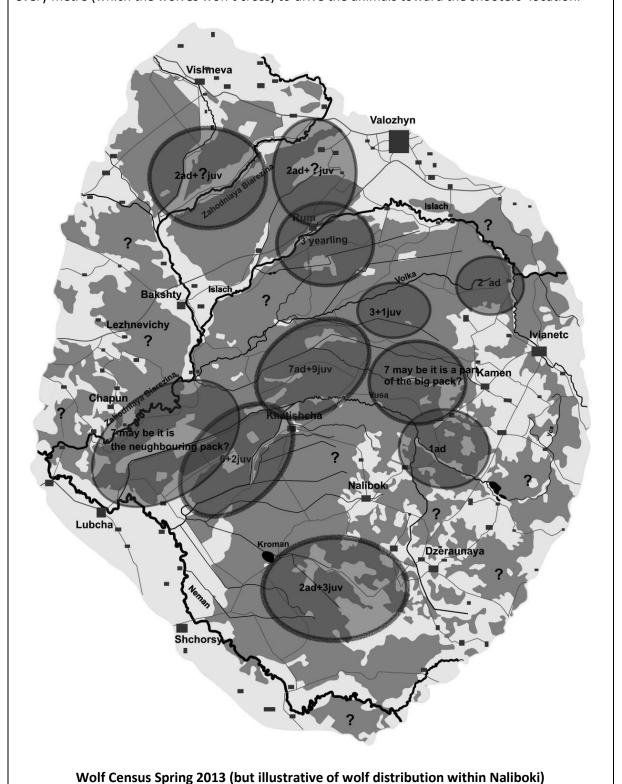
Mixed Age Group



Four Week Od Wolf Pup

Wolves breed only once a year; mating takes place in February/ March, and between four and seven pups are born from April to mid-May. In Naliboki wolves tend to choose denning sites in thickets with uprooted trees, either forest windfall sites, logged areas with a lot of tree remains, or in sandy areas in boggy habitats. The den is dug in a bank or under tree roots and is often located within 1 km of a road, which the parent wolves utilise as a convenient route to and from hunting areas (and to keep an eye on local human activity). Pups are born helpless; their eyes open after 10-13 days, and they can hear from 21 days. At four weeks of age they begin to explore their surroundings and are weaned by ten weeks. The whole pack cares for the pups. At eight weeks old, they are moved from the den to a safe place, often near water, where they continue to develop. By winter wolf pups must be able to travel and hunt with the pack, but mortality is high.

In 2013 there were believed to be a total number of 50-55 wolves within the forest. Longer term analysis, carried out by Vadim, has shown a fluctuation in the wolf population between a low of only 36 animals in 2006-8 and a high of 70 animals attained by 2011. Recently, as mentioned, numbers are again lower. Outside the core protected area of Naliboki the forest remains a hunting preserve. Wolves are mainly killed by hunt-drives. These hunts use red flagged markers set one every metre (which the wolves won't cross) to drive the animals toward the shooters' location.



DAY9

Today we travelled to a different part of the forest, comprising smaller conifers and underlain with lighter, sandier soils covered with thickets of bilberries. We had just left the vehicle, and I was slightly ahead of Vadim and his friend, walking along a well-defined, narrow track, bordered on either side by dense stands of young spruces. It was then that a mature **Wolf** emerged from one side of the dark wall of trees and crossed silently to the other, at a distance of ten meters! I turned to the others, but they had been looking down at their phones and had missed it! Entering a more open area I again glimpsed the **Wolf**, shadowing us. Vadim believed it was a mother and that an active den was close. Shortly afterwards, hidden under a log, we had found it! The den contained four pups, one was dead, but the others were healthy (two males and one female) seven to nine days old and still blind. Data was taken and, again, we left quickly, to allow the mother to return.



7-9 Day Old Pup



Male (in front) and Female 7-9 Day Old Pups in Den

Days 10 -12

My final days in Naliboki were also eventful, beginning with the discovery of a **Brown Bear** (*Ursus arctos*) shelter. In 2013 only one old male was thought to inhabit the forest, but evidence of a female, with cubs (two, it later transpired, one of which survived) confirmed the re-colonisation of Naliboki, starting from that year (the last previous recorded breeding of this species was in 1974).



Bear Shelter

New mammals seen included **Eurasian Otter** (*Lutra lutra*) a rare animal in Naliboki, **Racoon Dog** (*Nyctereutes procyonoides*) whose introduction has impacted the **Badger** population in adverse ways, notably 10% of badgers are suffocated every year because **Racoon Dogs**, when sharing a badger sett, awaken more frequently during winter and block up the **badger's** sleeping chamber.

A Weasel (Mustela nivalis), Wood Mouse (Apodemus sylvaticus), Bank Vole (Myodes glareolus) Red Squirrel (Sciurus vulgaris) and an encounter with another Elk (which are very large up close!) completed the mammals, except... it wasn't until the very last day, when we again passed the large meadow area closest to Naust, that - in the far corner of the field - I spied the unmistakable form of a Wisent (Bison bonasus)! Wisent disappeared from Naliboki as early as the 18th Century, due to overhunting, but was reintroduced here in 1994. From those original fifteen animals, despite some setbacks, including the long, harsh winter of 2012, the population stands at 100 or so today.

Notable other species included a rare raptor, **Booted Eagle** (*Hieraaetus pennatus*) of which only a handful possibly breed; **Whopper Swan** (*Cygnus cygnus*) which is a newly arrived species (mid-2000s) and which is still scarce (some 20 birds, half of which overwinter) and **Black Woodpecker** (*Dryocopus martius*) always a stunning bird. **Spadefoot Toad** (*Pelobates fuscus fuscus*) was a brand new amphibian for me, as were three butterflies, **Green Veined White** (*Pieris napi*) **Camberwell Beauty** (*Nymphalis antiopa*) (flying alongside the car!) and **Spotted Fritillary** (*Melitaea didyma*).

On my last night I went to photograph a **Hedgehog** I'd seen the previous evening (minus my camera). It was in the same spot. I then returned to the house, just 100 meters away. Driving to the airport the next morning, we saw a paw print in the mud. A **Lynx** had walked by in the night!



A Distant Wisent (Bison bonasus) (but I wasn't complaining)



Northern White-breasted Hedgehog (Erinaceus roumanicus)

MAMMAL CHECKLIST (23 SPECIES RECORDED AND 20 SEEN)

Wood Mouse (Apodemus sylvaticus)

Bank Vole (Myodes glareolus)

European Beaver (Castor fiber)

Red Squirrel (Sciurus vulgaris)

Mountain Hare (Lepus timidus)

Northern White-breasted Hedgehog (Erinaceus roumanicus)

Nathusius' Pipistrelle (Pipistrellus nathusii)

Parti-coloured Bat (Vespertilio murinus)

European Badger (Meles meles)*

Eurasian Otter (*Lutra lutra*)

Pine Marten (Martes martes)

European Polecat (Mustela putorius)

Weasel (Mustela nivalis)

Brown Bear (*Ursus arctos*)*

Wolf (Canis lupus)

Red Fox (Vulpes vulpes).

Racoon Dog (Nyctereutes procyonoides)

Northern lynx (Lynx lynx lynx)*

Wild Boar (Sus scrofa)

Elk (Alces alces)

Red Deer (Cervus elaphus).

European Roe Deer (Capreolus capreolus)

Wisent (Bison bonasus)

(*tracks)

BIRD CHECKLIST (100 SPECIES RECORDED AND 97 SEEN)

Eurasian Bittern* (Botaurus stellaris)

White Stork (Ciconia ciconia)

Whopper Swan (Cygnus cygnus)

Mallard (Anas platyrhynchos)

Eurasian Teal (Anas crecca)

Common Goldeneye (Bucephala clangula)

Black Kite (*Milvus migrans*)

Western Marsh Harrier (*Circus aeruginosus*)

Montagu's Harrier (Circus pygargus)

Eurasian Sparrowhawk (Accipiter nisus)

Common Buzzard (Buteo buteo)

European Honey Buzzard (Pernis apivorus)

Lesser Spotted Eagle (Clanga pomarina)

Common Kestrel (Falco tinnunculus)

Hazel Grouse (*Tetrastes bonasia*)

Black Grouse (Lyrurus tetrix)

Western Capercaillie (Tetrao urogallus)

Corncrake (*Crex crex*)

Spotted Crake* (Porzana porzana)

Common Moorhen (*Gallinula chloropus*)

Common Crane (*Grus grus*)

Northern Lapwing (Vanellus vanellus)

Common Snipe (Gallinago gallinago)

Great Snipe* (Gallinago media)

Eurasian Woodcock (Scolopax rusticola)

Wood Sandpiper (*Tringa glareola*)

Green Sandpiper (*Tringa ochropus*)

White-winged Black Tern (Chlidonias leucopterus)

Feral Dove (Columba livia)

Stock Dove (*Columba oenas*)

Common Wood Pigeon (Columba palumbus)

Common Cuckoo (Cuculus canorus)

European Nightjar (Caprimulgus europaeus)

Common Swift (Apus apus)

Eurasian Hoopoe (Upupa epops)

Black Woodpecker (*Dryocopus martius*)

Grey-headed Woodpecker (Picus canus)

Great-spotted Woodpecker (*Dendrocopos major*)

White-backed Woodpecker (Dendrocopos leucotos)

Eurasian Skylark (Alauda arvensis)

Sand Martin (Riparia riparia)

House Martin (Delichon urbicum)

Barn Swallow (*Hirundo rustica*)

Tree Pipit (Anthus trivialis)

Meadow Pipit (Anthus pratensis)

White Wagtail (Motacilla alba)

Western Yellow Wagtail (*Motacilla flava*)

Dunnock (Prunella modularis)

Thrush Nightingale (Luscinia luscinia)

Robin (Erithacus rubecula)

Bluethroat (Luscinia svecica)

Redstart (Phoenicurus phoenicurus)

Blackbird (Turdus merula)

Fieldfare (Turdus pilaris)

Song Thrush (Turdus philomelos)

Sedge Warbler (Acrocephalus schoenobaenus)

Garden Warbler (Sylvia borin)

Common Whitethroat (Sylvia communis)

Lesser Whitethroat (Sylvia curruca)

Blackcap (Sylvia atricapilla)

Wood Warbler (*Phylloscopus sibilatrix*)

Chiffchaff (Phylloscopus collybita)

Willow Warbler (Phylloscopus trochilus)

Spotted Flycatcher (*Muscicapa striata*)

Red-breasted Flycatcher (Ficedula parva)

European Pied Flycatcher (Ficedula hypoleuca)

Marsh Tit (Poecile palustris)

Great Tit (Parus major)

Eurasian Blue Tit (Cyanistes caeruleus)

Wren (*Troglodytes troglodytes*)

Red-backed Shrike (Lanius collurio)

Jay (Garrulus glandarius)

Hooded Crow (Corvus cornix)

Raven (Corvus corax)

Common Starling (Sturnus vulgaris)

House Sparrow (Passer domesticus)

Eurasian Tree Sparrow (Passer montanus)

Common Chaffinch (Fringilla coelebs)

Common Linnet (Linaria cannabina)

Goldfinch (Carduelis carduelis)

European Greenfinch (*Chloris chloris*)

Eurasian Bullfinch (Pyrrhula pyrrhula)

Hawfinch (Coccothraustes coccothraustes)

Yellowhammer(*Emberiza citrinella*)

Common Reed Bunting (Emberiza schoeniclus)

(*heard only)



White Stork (Ciconia ciconia) (with nesting material)

REPTILES AND AMPHIBIANS (Eight Species seen)

Common Frog (Rana temporaria)
Edible Frog (Pelophylax kl. esculentus)
Common Toad (Bufo bufo)
European Fire-bellied Toad ((Bombina bombina))
Common Spadefoot Toad (Pelobates fuscus)
Common Lizard (Zootoca vivipara)
Adder (Vipera berus)
Grass Snake (Natrix natrix)



Grass Snake (Natrix natrix)

Lepidoptera (Butterflies only recorded and nine species seen)

Large White (Pieris brassicae)
Green-veined White (Pieris napi)
Orange Tip (Anthocharis cardamines)
Brimstone (Gonepteryx rhamni)
Camberwell Beauty (Nymphalis antiopa)
Silver-washed Fritillary (Argynnis paphia)
Spotted Fritillary (Melitaea didyma)
Speckled Wood (Pararge aegeria)
Holly Blue (Celastrina argiolus)

This report is a personal account. I have tried to ensure information is correct as at November 2018. Any errors are mine.

Keith Millar