

The bird task:

1. Documentation of local birds:

a. European herring gull (*Larus argentatus*):



Figure 1: 28.04.2020 - USN Campus Bakkenteigen



Figure 2: 09.05.2020 – Verdens Ende

The European herring gull is a common gull on the coast of Norway and other western European countries. It lives mostly on the coast from northern Norway all the way to France, but most migrate in the autumn. The ones which live in southern Norway migrate mostly anywhere in-between Denmark and Portugal¹. They appear to be at the Norwegian coast year-around, since some birds might migrate from even more northern places to southern Norway and some are even permanent residents. It has a whitish body-colour and light gray wings with black tips. The beak is a yellow colour and the legs are mostly pink but can also be yellow. The breeding season starts around April. The herring gull is an omnivore, so they eat everything from fish, other aquatic prey, vegetables and even garbage, which sometimes takes up to fifty percent of its diet. It is classified to be a generalist and opportunist, since they scavenge close to everything they can eat. Their call is often seen as a loud laughing sound².

¹ https://www.miljolare.no/artstre/?or_id=162 (04.05.2020)

² https://en.wikipedia.org/wiki/European_herring_gull (04.05.2020)

b. *Common eider (Somateria mollissima)*:



Figure 3: 01.05.2020 - Borrestranda



Figure 4: 01.05.2020 - Borrestranda

The common eider lives on the coast of many northern countries, like Norway, Canada and even eastern Siberia. This species is mostly a permanent resident and only might fly short distances to hibernate. The breeding season starts from April until May and they can breed in large colonies³. In this species the female is easy to differ from the male, since the male has black and white plumage with a grayish beak, and the females body colour is brown, and the beak seems dark green. Although the colour of the female might be similar to a duck, they differ in their head shape and total size. The common eider is mostly a carnivore, since its diet consists mostly of mussels, snails and crustaceans. But the female might consume some plants during breeding season⁴.

c. *Mallard (Anas platyrhynchos)*:



Figure 5: 01.05.2020 - Borrestranda

The Mallard is very common bird in the northern as well as in the southern hemisphere. The species is very adaptable and therefore is home in many different countries around the world. In southern Norway most don't migrate but are residents

³ https://www.miljolare.no/artstre/?side=syst&land=578&or_id=3182&orgkat=. (04.05.2020)

⁴ <https://de.wikipedia.org/wiki/Eiderente> (04.05.2020)

year-round⁵. The male Mallard is easy to differ from a female, since he has a green head with a yellowish beak and a brown body. The female has a brown body and wings which is mostly mottled and has a darker beak. The Mallard is an omnivore and therefore is very flexible in its diet. Most of the diet consists of slugs, insects, seeds, roots and other plants⁶.

d. *Common sandpiper (Actitis hypoleucos)*:



Figure 6: 01.05.2020 - Borrestranda

The common sandpiper has a brown/ grey upper body, a white bottom with yellow legs and the beak is lighter colour. It is a palearctic bird and in Norway the bird is breeding and mostly migrates to Africa or southern Asia. The diet consists mostly of insects, spiders, crustaceans and therefore classifies as a carnivore⁷.

e. *Northern wheatear (Oenanthe Oenanthe)*:



Figure 7: 01.05.2020 - Borrestranda

⁵ https://www.miljolare.no/artstre/?or_id=158 (04.05.2020)

⁶ <https://en.wikipedia.org/wiki/Mallard#Description> (04.05.2020)

⁷ ????

The northern wheatear is a migratory and palearctic bird. The birds breeding in Norway migrate to Africa in winter to hibernate, and therefore has one of the longest routes for its size. The males have a grey head and body with a black stripe across the eyes. The chest is ochre coloured with the rest of the body being white and the wings being black. The females look similar, but the colours are not as vibrant and strong as on the male⁸.

f. *Great tit (Parus major)*:



Figure 8: 30.04.2020 - Adalstjern forest

The great tit is the most common of the tit species in Europe and even parts of central Asia, found in the most forest types. It is easily identified because of the vibrant colours of its body. The head and the throat have a blueish to blackish colour, but the cheeks are white. The blue/ black colour continues from the throat in a broad black stripe down the body. Left and right from the stripe the body is in a bright yellow colour. The legs are blue, and the beak is relatively small and mostly black. The nape and the back are greenish, and the wings have a blue and grey colour with white tips⁹. The female has the same colour scheme, but the blackish line down the body is not as broad. The great tit is mostly not migratory and therefore stays close to its territory throughout the year. Its diet in summer is mostly insectivorous, but in winter they vary their diet to the availability of the local food resources¹⁰.

⁸ https://de.wikipedia.org/wiki/Steinschm%C3%A4tzer_%28Art%29 (04.05.2020)

⁹ https://www.miljolare.no/artstre/?or_id=447 (04.05.2020)

¹⁰ https://en.wikipedia.org/wiki/Great_tit (04.05.2020)

g. *Willow tit (Poecile montanus)*:



Figure 9: 30.04.2020 - Adalstjern forest

The willow tit is a common bird across the Palearctic. The top of its head is solid black, and the rest of the body is white and light grey¹¹. It is a stationary bird, which normally hibernates in its breeding area. The willow tits diet is mostly insectivorous but can extent to seeds and berries for the wintertime¹².

h. *Common chaffinch (Fringilla coelebs)*:

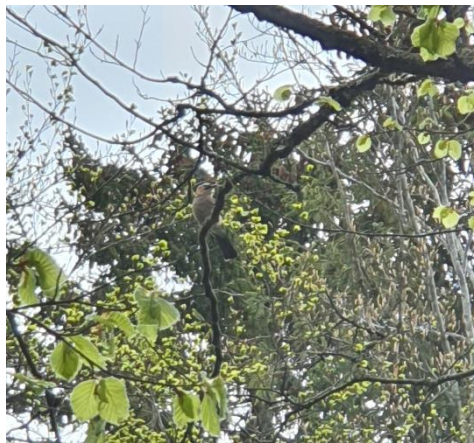


Figure 10: 30.04.2020 - Adalstjern forest



Figure 11: 30.04.2020 - Adalstjern forest

The male common chaffinch, which I photographed in the pictures above, is easy to differ from the female, since the female has duller colours, mostly brown or greyish. The male in comparison has a black forehead, a blueish nape and the back, the upper body and the face seems a brown to reddish colour. The wings are mostly dark grey and white. The common chaffinch can be migratory, but some individuals stay in southern Norway, most migrate to western Europe from September to March¹³. Its

¹¹ https://en.wikipedia.org/wiki/Willow_tit (05.05.2020)

¹² https://www.miljolare.no/artstre/?or_id=491 (05.05.2020)

¹³ https://www.miljolare.no/artstre/?or_id=489 (05.05.2020)

diet consists mostly of seeds, berries and plant matter, but can also include insects and spiders¹⁴.

i. *Hooded crow (Corvus cornix)*:



Figure 12: 29.04.2020 - Borre

The hooded crow lives in many Eurasian countries. The most part of the body, besides the head, throat, tail and wings, are a dark greyish colour with the rest being black. The legs and the beak are black as well, and this colour scheme is the same for both sexes¹⁵. The hooded crow is an omnivore and often called a scavenger, since it eats everything in between crabs, eggs from other birds, insects, bread and even waste. They are mostly a resident in southern Norway, but in other places they might migrate to the coast in wintertime¹⁶.

j. *House sparrow (Passer domesticus)*:



Figure 13: 29.04.2020 - Borre



Figure 14: 29.04.2020 - Borre

¹⁴ https://www.miljolare.no/artstre/?or_id=489 (05.05.2020)

¹⁵ https://en.wikipedia.org/wiki/Hooded_crow (05.05.2020)

¹⁶ https://www.miljolare.no/artstre/?or_id=37 (05.05.2020)

The house sparrow is one of the most common birds in most Eurasian countries and is proven to be linked with the presence of humans. It mostly doesn't migrate and if it does it is only for short distances ¹⁷. The sexes have a similar colour scheme, but the colours on the male are more vibrant. The males have a dark grey throat and their breast and lower body is a lighter grey. From the eyes until the nape the plumage is brown. The back is also brown, and the wings are white, black and brown coloured. It has a small beak which is mostly dark with black plumage around it. Its diet consists mostly of insects and seeds but is very adaptable to the local resources ¹⁸.

k. *Common chiffchaff (Phylloscopus collybita)*:

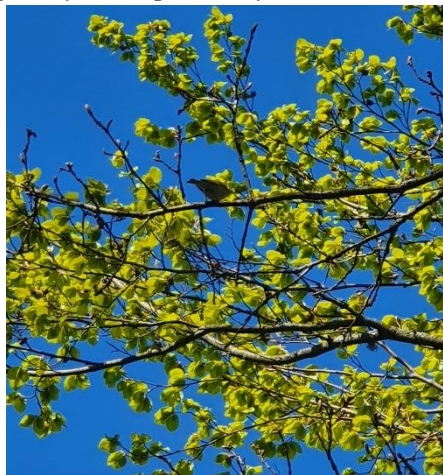


Figure 15: 29.04.2020 - Adalstjern forest

Both sexes of the common chiffchaff have around the same weight and look quite the same, except that the wings are a little longer on a male's body. The upper part of their body is brownish/ greenish, whilst the underparts are mostly a dusty whiteish colour. The beak is thin, short and bright orange to a darker and more subtle colour. The legs are mostly dark brown or black. The common chiffchaff is an insectivore and therefore mostly looks for small insects in all their developing stages. It is a migratory bird, which stays in the palearctic countries during the breeding season and flies all the way to southern Europe or even Africa to hibernate ¹⁹. In southern Norway it returns mostly around Mid-April ²⁰.

¹⁷ https://www.miljolare.no/artstre/?or_id=217 (05.05.2020)

¹⁸ https://en.wikipedia.org/wiki/House_sparrow (05.05.2020)

¹⁹ https://en.wikipedia.org/wiki/Common_chiffchaff (05.05.2020)

²⁰ https://www.miljolare.no/artstre/?or_id=498 (05.05.2020)

l. *Common magpie (Pica pica):*



Figure 16: 29.04.2020 - Borre



Figure 17: 29.04.2020 - Borre

The plumage of the common magpie consists mostly out of two colours, which are easily spotted, black and white. This is the same for both male and female, they only have a small difference in size, but not in any other appearances. The belly and shoulders are white, while the rest of the body is mostly glossy black. Both the beak and the legs are black. The magpie is very common all over Europe, North-Africa and even Asia. It is mostly a resident and even if it moves, only short distances ²¹. The diet of the common magpie is omnivorous, meaning it eats everything from small mammals, vegetables to insects ²².

2. Documentation of the birdsongs:

All the birdsongs I recorded are online, follow this link:

<https://wordpress.usn.no/236227/ecology/bird-task/>

I identified the following birds: *Actitis hypoleucos*; *Erithacus rubecula*; *Larus argentatus*; *Fringilla coelebs*; *Turdus philomedos*

3. Bird ringing in Germany:

1) How are birds caught for ringing in Germany?

Many birds already are ringed as a fledgling in their nest, as this is way easier than catching the grown-up birds. For catching them you need more complex methods. Smaller birds are mostly caught with fine nets, which are called “Japannetz” in German (“Japan-mesh” would be the direct English



Figure 18: *Carduelis flammea* in a “Japan-mesh” (Source: EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): *Vogelberingung für Wissenschaft und Naturschutz*, p. 6)

²¹ https://www.miljolare.no/artstre/?or_id=216 (05.05.2020)

²² https://en.wikipedia.org/wiki/Eurasian_magpie (05.05.2020)

translation). Bigger birds might be caught with laying out some bait at a weir or another trap. During this whole process the bird ringers should always be very cautious whilst handling birds. With the usage of different rings, you can identify them easily without having to catch them again. Once caught they are ringed, with an individual ring and number mostly on the leg, but it can also be on the neck or even as marks on the wings²³. For the ringing a ringing plier is used for an easier application of the ring. After the ringing they are closely examined. With analysing the plumage, you can extrapolate the age and the sex of the bird. The last step is to measure the primal feather with a wing ruler, since it relates to the full body size²⁴. After that you can set them free again.

Since Germany is a member of the EURING project the rings used all over Europa are similar. The traditional rings are made of metal, which has a different level of hardness depending on its purpose. They are called “bird-observatories-rings” in German and they show an individual ring number, which is made of a letter and number combination and mostly as well the origin. They are mostly so-called open rings, so they can easily be removed if needed. This type of ring is the most used for research purposes. But the downside is, that you can only read it close up, so often there are also additional or special rings used to make it more effective. For birds that live in the water rings around the neck are often used. Bigger birds often get coloured rings around their legs or tags on their wings. All this is meant to make it easier for the scientists to spot the number and letter combination. Furthermore, today the usage of GPS-tracking and satellites is a big part of the bird ringing. Besides the scientific use of rings there are also bird rings from breeders. They are mostly closed and colourful rings. They are only used for marking them and can’t be taken off without destroying them.



Figure 19: Bird-observatories-rings (Source:

<https://www.beringungszentrale-hiddensee.de/vogelberingung/welche-ringe-gibt-es/>)



Figure 20: Additional rings (Source:

<https://www.beringungszentrale-hiddensee.de/vogelberingung/welche-ringe-gibt-es/>)



Figure 21: Breeders-rings (Source:

<https://www.beringungszentrale-hiddensee.de/vogelberingung/welche-ringe-gibt-es/>)

²³ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.4

²⁴ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.5

2) *For how long time have birds been ringed (in the world and in your country)?*

The bird ringing for scientific purposes started 1899 in Denmark, where C. H. Mortensen made an experiment of ringing starlings with a ring, where a return address was engraved. Since this was very successful it was fast adapted to the whole of Europe. A German professor started with the bird ringing at a bird observatory in Rybatschi around 1901. And in 1909 the bird observatory in Helgoland, Germany, started on working with the bird ringing for scientific questions²⁵.

3) *What can we find out by ringing birds?*

- Migratory behaviour: Distances, hibernation, small or wide passages, lack of food leads to mass migration → nowadays: rough patterns of different birds identified²⁶
- Monitoring: Goal is to document changes in numbers of the bird populations. Possibility to observe a lifespan of a bird²⁷
- Climate change: Is there a coherence between bird populations and climate change or changes in the environment²⁸?
- Behaviour- and evolution studies: The bird ringing is a reason for why birds are the best researched vertebrate concerning evolution. With individual ringing it is possible to research more about the mating and their behaviour and therefore also the continuity of the population²⁹.
- Nature conservation: With tracking their routes and breeding locations it is possible to try to make these more secure for the individuals³⁰.

²⁵ <https://www.beringungszentrale-hiddensee.de/vogelberingung/historie/> (06.05.2020)

²⁶ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.12f

²⁷ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.16f

²⁸ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.24f

²⁹ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.20f

³⁰ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.28f

4) *What to do if you find a ringed bird?*

To report the found bird or ring you can use the website www.ring.ac to enter all the details. First of note down the ring number and any further initials on the ring. If the bird is dead you can send the ring to one of the bird ringing headquarters in Germany, which you can find on the website <http://proring.de/deutsche-beringungszentralen.html>. Furthermore, note the place of finding with the name of the next town, the coordinates and the date. Is the bird dead or alive? If it is dead and its possible to identify the cause of death mention it as well and if it is still alive mention what its condition was like. If its possible identify the bird and send a picture. Leave your name and address for more information on the ringing of the bird³¹.

³¹ EURING – The European Union for Bird Ringing c/o British Trust for Ornithology (2011): Vogelberingung für Wissenschaft und Naturschutz, p.4