Youth for Arctic Nature

Spring 2021 monitoring protocol

What should you monitor?

For spring 2021, the YAN project is going to be focusing on birds, especially migratory birds. We will provide you with information about the birds we preselected for the project, but you can add as many as you like. Either print out the data sheet we provide at the end of this document or use the digital form directly on your phone. Just try to note when you see migratory birds arriving in spring, how many you saw, and when and where you saw them. You can also go out in areas of your choice, like a garden or the beach, and try to count the birds you see. When you submit a monitoring report, this are the information you will need to provide:

- Date of observation
- Location (you will be able to register monitoring areas)
- Species (use the Latin name when you submit to avoid translation issues)
- Number of individuals

Additionally, if you can, you can also provide *approximate* information about

- The weather during monitoring (temperature, wind speed, cloud cover, precipitation)
- The starting and ending times of your observation

Who should be in your monitoring team?

Anyone between 10 and 18 years old can be in the monitoring team! There is no formal signup, so participants can monitor casually, or involve themselves in the program as much as they want. The only important thing is that the team as a whole should be active through the spring.

Should the whole team go out to monitor together each time?

Not necessarily! If you want to go out and count birds in groups, that is great, but if you see an interesting bird when you are alone, you can also definitely report it.

How many times a week should our team monitor birds?

Mark down whenever you see new migratory birds arriving in spring if you can, and if possible, record your observations of a species until it has arrived for good (when you have seen around 10 individuals). Other monitoring like bird counts at specific locations, are optional, and you can do them whenever you want.

Step 1: Registering your team

Fill in the team registration form. For this, you just need to choose a team name and a youth leader. The youth leader must be an adult (18 or older) who will be our contact for your team. You can always go back on the form to change the youth leader.

Once the team is registered, we will add it to our database, and you will be able to choose monitoring plots and start monitoring!

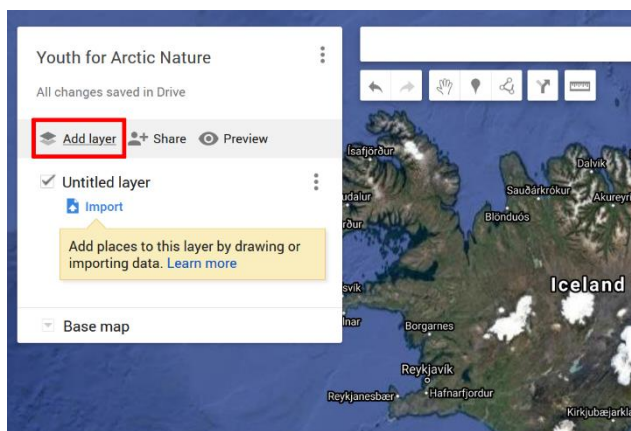## Step 2: Registering your plots

Once the team is registered, we will send the youth leader a customizable and cooperative map. Now, you can choose the areas you want to monitor!

IMPORTANT: Your monitoring plots should not be too small, because this project does not need to pinpoint exactly where a bird was seen. For example, a good size for a monitoring plot is a park, a small forest, a community garden, a school, or your town's harbor and coastline.
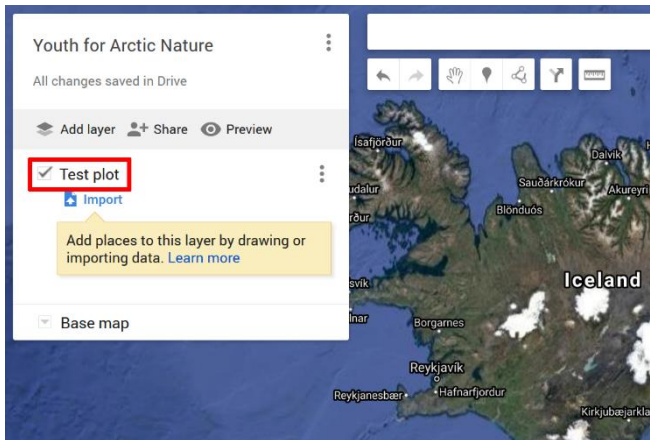
You can add as many as you want, however small or big, whenever you want. Each plot should be defined on a separate layer.

How to create a monitoring plot?
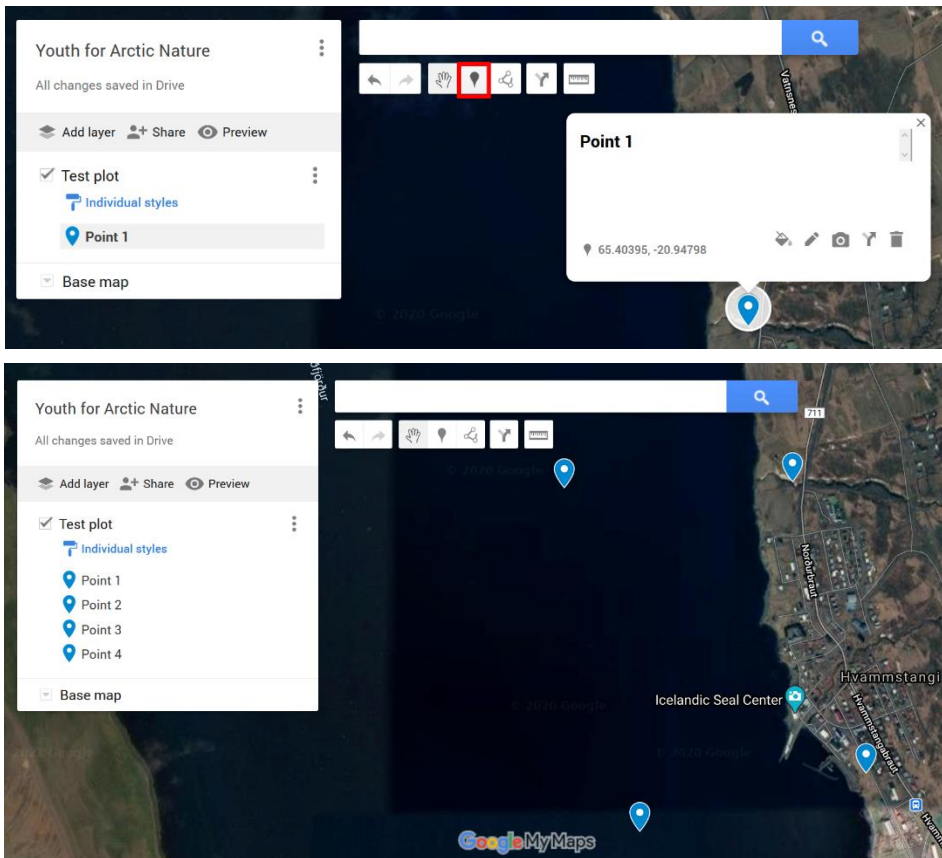
1. Create a new layer

2. Name your monitoring plot

3. Define your monitoring plot by delimiting the area using 4 markers

4. Create a new layer every time you define a new plot

Step 3: start monitoring!

You can go out monitoring using the printed data sheet provided on the next page, or you can immediately fill out the form online. For the physical data sheet:

- Just write the time once at the start of your monitoring, and once at the end
- If it doesn't change a lot, all weather data can be written down only once at the start of your observation. You are not required to collect weather data, but it can be interesting to gain insight on why you may see more or less individuals depending on days. For example, if the wind is very strong, it might be harder to spot birds on the sea.
    - For the cloud cover, write down an estimation of how much sky is covered by cloud in percentage. This doesn't have to be very precise. 0% means no clouds, 50% means half the sky is covered, etc.
    - Rate the wind speed on a scale of 1 (no wind) to 4 (strong wind)
    - For the weather, just write if there is snow, rain, hail, or nothing.

Whenever you want, you can report your observations by filling out this form. You can enter data alone or together; you just have to identify your team name.

IMPORTANT: use the same plot names as the ones you defined in your map.

Date	Monitoring area	Time (start-end)	Temp (°C)	Sky covered (%)	Wind (1-4)	Weather	Species	Number of individuals	Comments

How to read the fact sheets?

Fact sheets about the birds that we preselected for monitoring are available here.
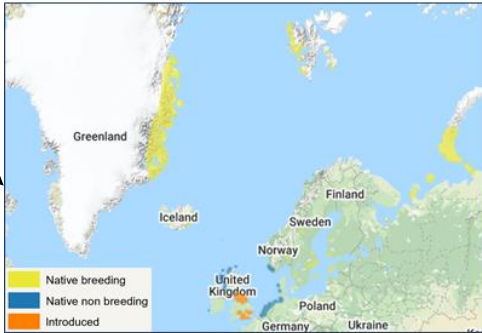
Latin name of the species.

Length from tail to head.

Wingspan (from the tip of one wing to the other).

Distribution map.

IUCN (International Union for Conservation of Nature) status:
LC: Least concern.
NT: Near threatened.
VU/EN/CR: Threatened.

Estimate of total individuals in population and year of estimate.

Barnacle goose
(*Branta leucopsis*)

Identification   L: 58–70 cm S: 132–145 cm

The barnacle goose is medium sized with distinct white underparts, grey wings, black neck and white face. Its bill and legs are black.
It has a call that is similar to a dog barking in the distance.

Distribution

The barnacle goose is originally a high arctic breeder, breeding in northeast Greenland, Svalbard and Siberia.
Since the 1980's, new breeding colonies have been established in Baltic sea (Sweden, Denmark, Finland, Estonia) and in the North sea (Netherlands, Belgium, Germany).
Since 1998, this goose has also been breeding in the south of Iceland.
High arctic breeding pairs winter in the UK, the Netherlands, and the North sea.

Native breeding
Native non breeding
Introduced

Why this species?

- Representative for the Arctic, where it is very migratory
- Breeding in Iceland, Greenland, Norway, and Svalbard
- Beautiful and friendly bird, easy to identify
- This species is doing very well compared to other goose species. Why is that?

Population

Estimated 880,000 (2015) and increasing

LC

Fun facts

Commonly in European folklore, it was said that the barnacle goose survived the winter as a barnacle because of the shape of its beak, reminiscent of the mollusk
Barnacle geese nest on high cliffs to escape arctic fox predation. However, there is no food on the cliffs. Thus, as soon as the gooselings are born, they must risk death and jump from the cliffs, gliding all the way down, to find food in the valley with their parents

Residence period in different Arctic regions

IS
FO
SV
EG

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Area:
Iceland (IS)
Faroe Islands (FO)
Svalbard (SV)
East Greenland (EG)

Presence in different areas. Dark yellow means that the species is common, pale yellow means uncommon.

The size of the yellow bars represents how common the species is in the country compared to the maximum number expected for this species.