A COMMUNITY DEVELOPMENT APPROACH TOWARDS REGENERATIVE TOURISM:

Citizen Science Pilot Project in Snæfellsnes

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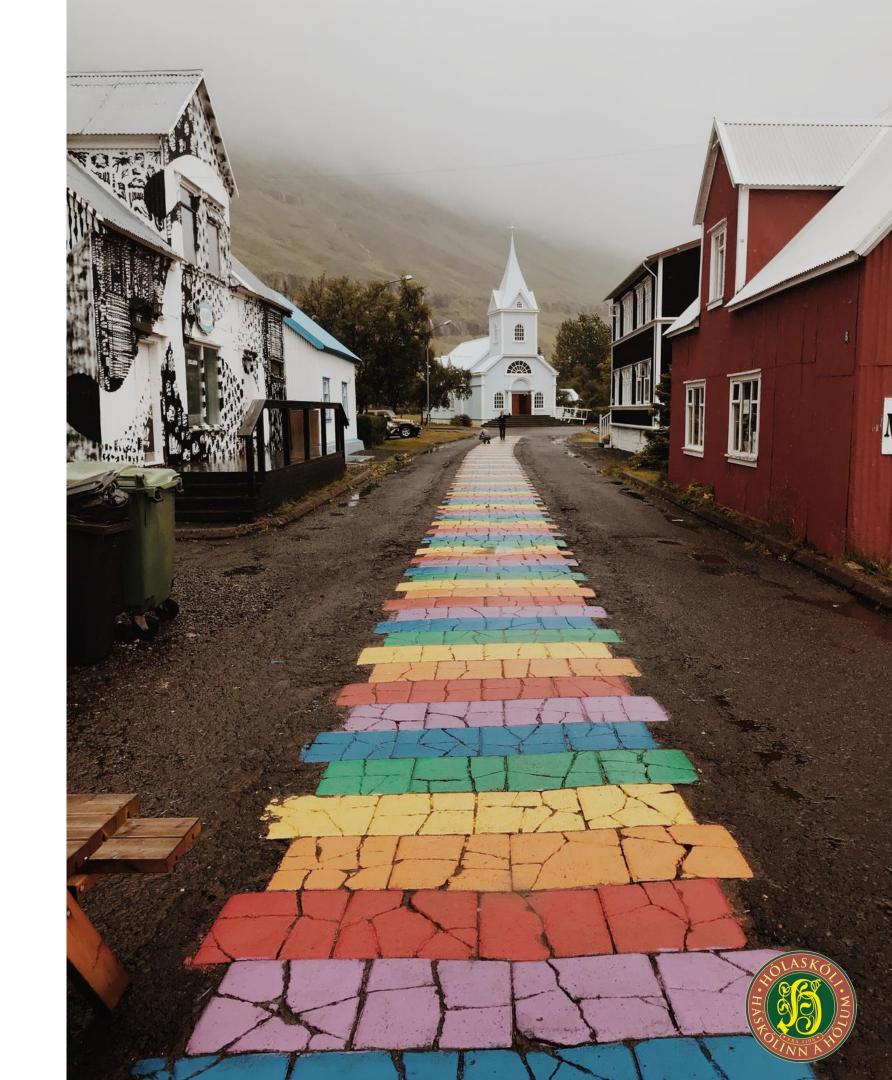






PRESENTATION OUTLINE

- Community Development and Regional Development
- Case Study in Snæfellsnes
 - Out line the steps for CS



WHAT IS COMMUNITY DEVELOPMENT?

- "the concept of community development has a strong emphasis on equality with a focus on building and sharing capacity for improvements in a community" (Aquino et al., 2024)
- Classroom, cultural group, geographical community
 - Building and sharing capacity that leads to Social movements and improvements in a community.
 - Equality and inclusion





COMMUNITY DEVELOPMENT

Process and outcome

- It is through this process of mobilizing and acting collectively that the outcomes lead to a better functioning and resilient community.
- The ability to mobilize is often described as social capacity
 - collection of skills of which members of a community can work together effectively
 - networks, knowledge, resources, organization, and governance.
 - Inclusion working with groups who are often not heard.



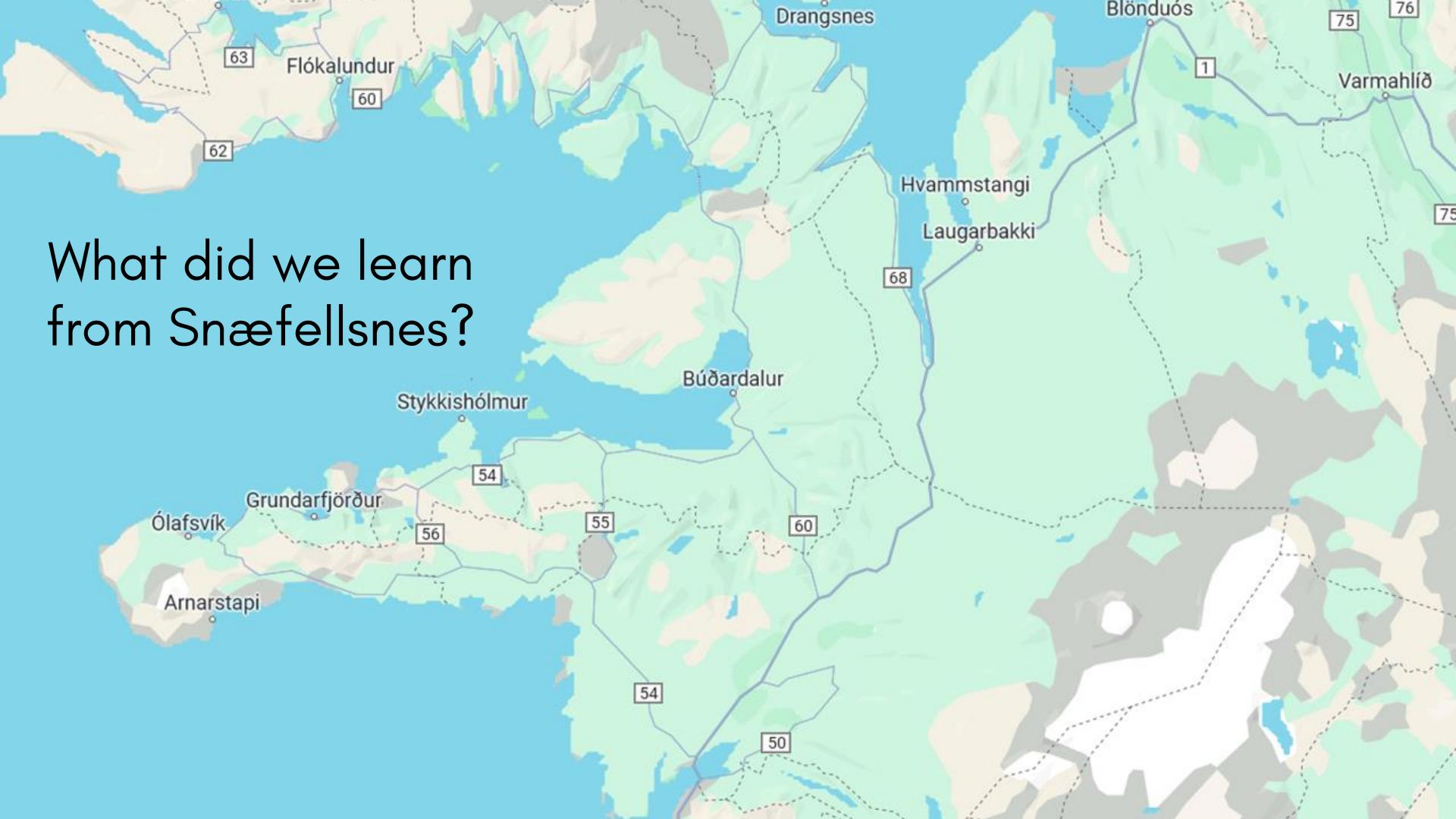


Regional Development

...the process of making regions more equitable, inclusive, and resilient (OECD, n.d.) through the collaboration to facilitate socio-economic and environmental improvement (McConnell et al., 2022) that underline the broader sustainable standards of living and quality of life (Pike et al., 2017).

- Inclusion in policymaking (equitable)
- Leads to better policies
- Directing actions and priorities for specific progress to occur.





Context of seals and tourism in Iceland

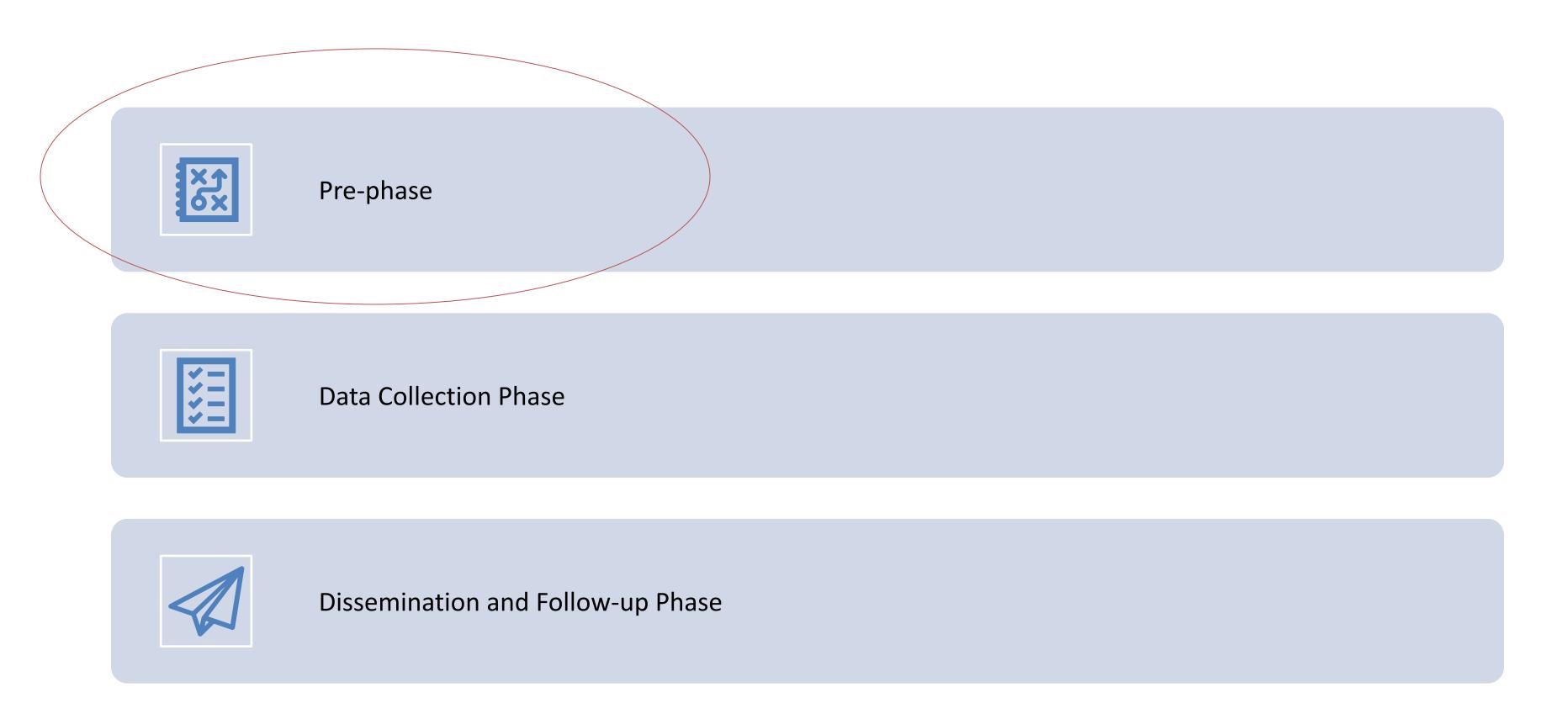
- Two seal species that breed in Iceland
 - Harbor seal (endangered)
 - Grey seal (vulnerable)
- Population monitoring to understand and protect populations
- Tourism disturbance
- More education and awareness





Photos by Alan de Witt, used with permission

Methodological Development



Pre-phase

• 1. What do we have?

- Inventory of assets
- Connection people together
 - Landowners
 - Schools
 - Scientists
 - Visitors
 - Park Rangers
 - Storyteller
 - Business owners
 - Staff at the Information Center
 - Organizations (YAN, ISC, and NorReg)

• 2. What do we want?

• A vision that guides us. Should consider ethics and values.

















CITIZEN SCIENCE IN SNÆFELLSNES SEAL MONITORING IN YTRI TUNGA



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Youth for Arctic Nature

Ragnhildur Sigurðardóttir, Manager

Snæfellsnes Regional Park

Dr Sandra Granquist, Marine biologist

Marine and Freshwater Research Center and Icelandic Seal Center

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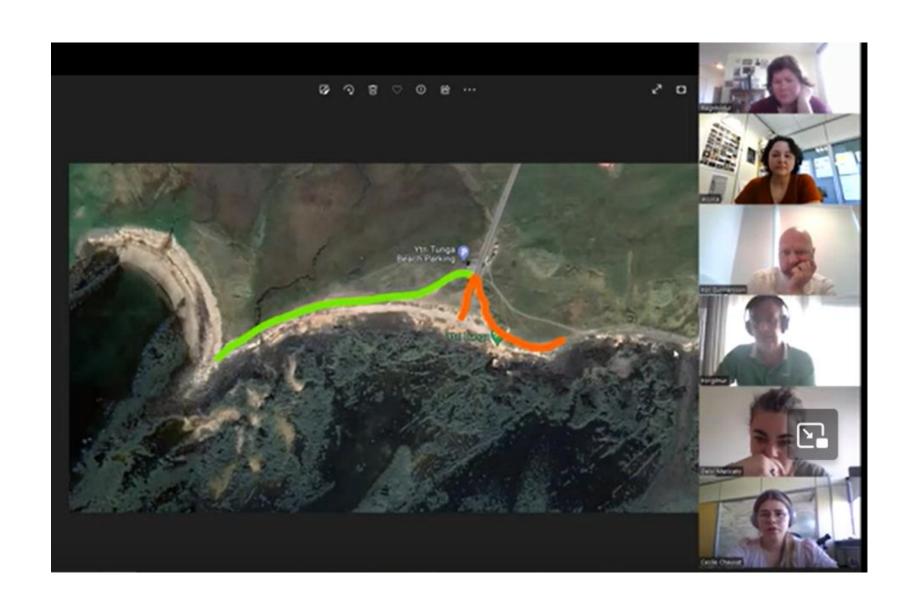
Örvar Birkir Eiríksson, Manager

Icelandic Seal Center

Deisi Maricato, Pedagogist and PhD student
University of Iceland



Pre-phase



3. How do we get there?

- Outline the steps needed—set goals and actions.
 - We met several times with the community

4. What have we done and what do we need to do now?

 Reflection of what we have done is important, it helps celebrate milestones and helps to monitor any issues that may need adjustment.

Pilot project in Snæfellsnes

Citizen Science 2023-2024

Overall project aims:

- Scientific research on the number of targeted species monitored.
- Environmental education and training to help youth and novice people who want to learn more about wildlife monitoring.
- Connect with local schools and local stakeholders in Snæfellsnes to establish a long-term monitoring project.
- Learn about the impacts of how CS projects benefit environmental and social aspects of local areas.

Site:

- Ytri tunga in southern Snæfellsnes
- Popular site
- Known for seal watching
- Includes signs and paths but visitor behavior can cause issues





Are you interested in participating in a local

SEAL MONITORING PROJECT?

How can you help?

Participate in collecting data on numbers of seals at Ytri Tunga beach, which is an important area for seal conservation in Snæfellsnes.

Why?

Two seal species breed in Iceland, grey seals and harbor seals, which are considered vulnerable and endangered respectively on the Icelandic Red List. Seal populations should be monitored to be managed effectively.



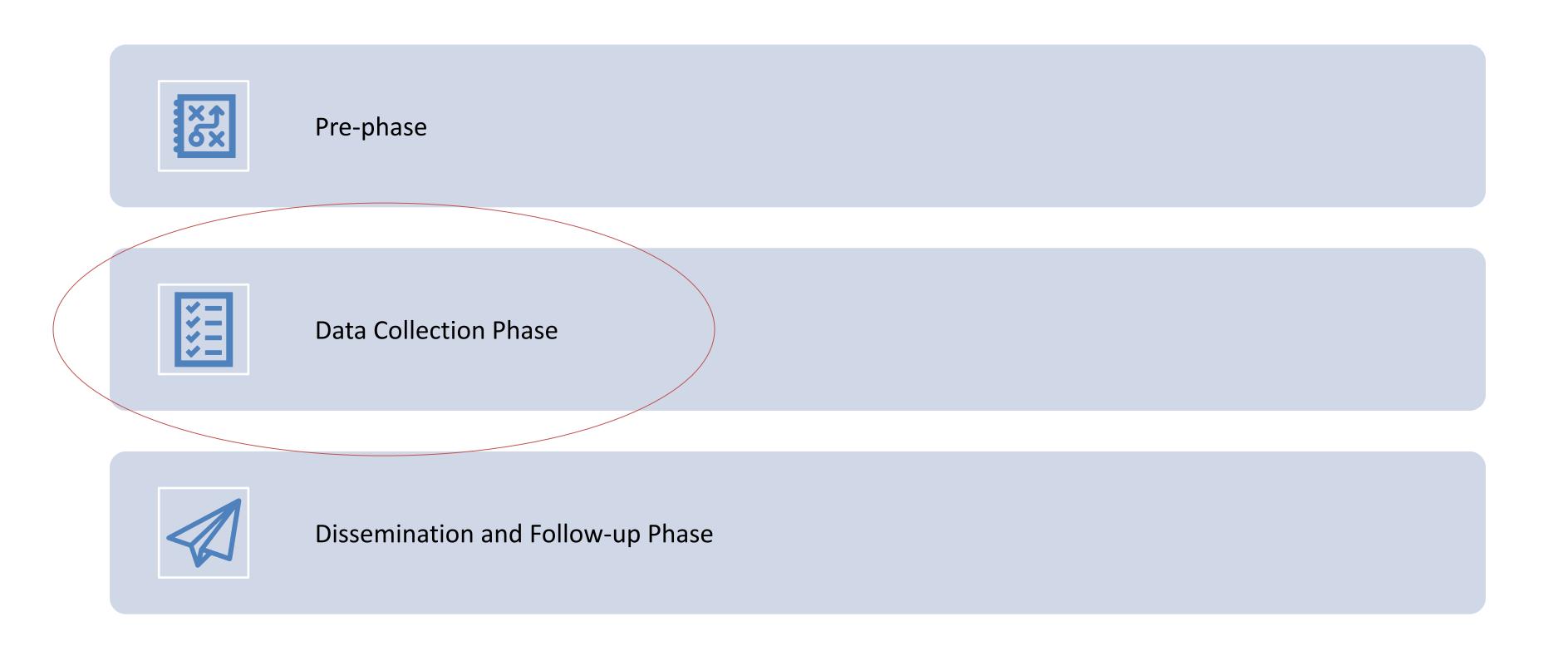
Follow the QR code to participate or talk to hotel reception for a paper version





Organized by Youth for Arctic Nature (<u>www.arcticnature.org</u>) in collaboration with the Icelandic Seal Center

Methodological Development



www.arcticnature.org/ytri-tunga-seal-monitoring.html

Materials

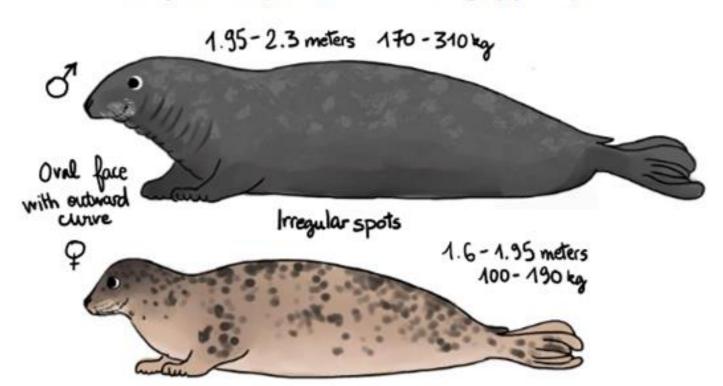
To participate in seal monitoring, you need this **information and protocol sheet** and the printed **data sheet** which you will get from hotel reception. You also need **binoculars** (at least 8x42), and a **pencil**. You can also borrow the pair of binoculars from hotel reception. Please return them when you are done.



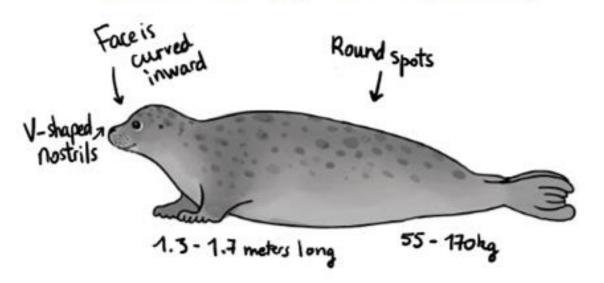
What?

Seals at Ytri Tunga belong to either of the two seal species that breed in Iceland (except for very rare vagrants). Here is a small guide on recognizing them.

Grey seal (Halichoerus grypus)



Harbor seal (Phoca vitulina)



Endangered in Iceland



Vulnerable in Iceland



When?

The best time to count is within 30 minutes of low tide (low tide times are provided below).

| June | | | July | | | August | | | September | | |
|------------|--|------------------|-------------|------------------|------------------|--------------|------------------|------------------|----------------|------------------|------------------|
| Day | Morning low tide | Evening low tide | Day | Morning low tide | Evening low tide | Day | Morning low tide | Evening low tide | Day | Morning low tide | Evening low tide |
| (A. 10.00) | A STATE OF THE STA | | 01/07/2023 | 11:01 | 23:41 | 01/08/2023 | 00:19 | 12:27 | 01/09/2023 | 01:29 | 13:39 |
| | | | an landaria | | | en inn ferne | | | are the decree | | 2.2.2.2 |

How?

- First, fill in the time and weather data section.
- 2. Seal counting (refer to the map)

For results to be accurate, it is important to count the entire area and not to count outside the area outlined in white dashes on the map.

Be careful to keep track of which seals you have already counted so you do not count them twice. It can be easier to break down the count into smaller areas and to add-up numbers at the end.

Try to identify seal species. If you are not sure about a seal's species, you can count it as "unknown".

- Walk to point A from the parking lot to start the count.
- Follow only the green paths indicated on the map, and count as you go.
- After you return to the parking lot from point A, make sure to visit point B which has a great field of view.
- After you return from point B, continue towards point C and end the count there. You can
 walk back to the parking lot through the orange path to make a loop.
- 3. Write down your results in the printed table you got from hotel reception.
- 4. When you are done, please follow the QR code on the data sheet to take the survey about your experience!
- You can deposit the data sheet in the box which you will find in the small building on the parking lot (point D).
- 6. If you would like to share any pictures of the activity or the seals to us, please send them to cecile@nnv.is. These pictures could be used in social media or reports.

Be mindful: the seals are at home, and we are observers. Protect the seals from disturbance during seal monitoring.

- Move gently, keep your voice down never throw objects.
- Keep respectful distance (100m/yds) never touch.
- Never approach a sole pup mum is nearby.
- Move away if seals show signs of disturbance head up/vigilance or fleeing.
- No drones please.

| Date (DD/MM/YYYY): 1. 9.2023 | Time at start of observation: | | | | | |
|---|-------------------------------------|--|--|--|--|--|
| Number of observers: 2 | Time at end of observation: 17.30 | | | | | |
| Cloud cover (please indicate the percentage of the sky covered by clouds): 0%-25% □ 25%-50% □ 50%-75% □ 75%-100% □ | | | | | | |
| Wind: No wind□ Light wind ☑ | Some wind ☐ Strong wind ☐ | | | | | |
| Precipitation: No precipitation☐ Light rai | n⊠ Heavy rain□ Snow□ Fog□ | | | | | |

| | Seal count | | | | | | | | | |
|--------------|------------|---------|-------------|-----------|---------|--|--|--|--|--|
| In the water | Li | Ž. | On land | | | | | | | |
| Harbor seal | Grey seal | Unknown | Harbor seal | Grey seal | Unknown | | | | | |
| 2 | 3 | 2 | | 7 | 4 | | | | | |

Data Collection and Project Evaluation

- The data sheets were collected from the landowner at Ytri Tunga and Hótel Snæfellsnes and analysed by a scientists connected with the YAN project.
- At the end of CS pilot project an evaluation with all the project partners was conducted in November 2023



Methodological Development



Pre-phase



Data Collection Phase



Dissemination and Follow-up Phase



Results

- Average time spent: 2 hours and 30 minutes (1-4 hours)
 - 15 Min
 - "Drop-in"
- Potential partnering with the Great seal Count
- Project partners enjoyed working on the project.
- Connection with the community
 - Schools: connected will with learning activities

What's next

- Continue work with storytellers, rangers, and teachers
- Environmental education and monitoring with local schools
- Further collaboration with businesses and landowners towards regenerative tourism









