I laid down on the edge of the cliff to enjoy the sound of the sea. I was there for a moment. Out of the blue a huge group of seagulls flew over me. I could almost touch them, the only sound I could hear was the sound of their wings. Now I understand – birdwatchers!
INTRODUCTION

Watching the Birds is about designing a visitor centre with connections to bird watching areas in Djupivogur, Iceland.

Djupivogur is in East Iceland and the area around Djupivogur is rich in birdlife.

The area is listed as an important bird area by Birdlife International and is considered a major entry and exit point for nearly all of Iceland's migrant bird species.

The area is full of marshes, ponds and beaches which are the natural habitats of many species of birds.

The area is full of marshes, ponds and beaches which are the natural habitats of many species of birds.

Birds are accessible within easy reach from the village for bird watchers. For some time local people have been promoting bird watching tourism in the area.

Today there's a small bird museum in the centre of the village and few bird watching hides spread outside it.

The idea is to build upon what has already been accomplished by the locals and take the bird museum and the bird watching hides and walk through the area and combine those activities into one program.

The project is to design a visitor centre which is a starting and completing destination of a promenade through the area. The focus will be on the visitor centre itself in this master thesis.
When spring arrives the community in Djúpivogur comes alive. Tourists stream from all parts of the world alongside with the migratory birds. For quite some time an enthusiastic club in Djúpivogur has been promoting bird-watching tourism. The website www.birds.is was established to promote bird watching in the area. In 2008 a small bird- and rock museum was founded in the village. The bird museum has 140 stuffed birds and gives a good idea of the variety of birds in the area. In 2009 an outdoor artwork by Sigurður Gudmundsson was unveiled in the harbour. The artwork consists of 34 large scale replicas representing 34 of 57 bird species found in the area.

About 100 species of birds lay their eggs in Iceland and 73 species every year. 57 of them lay their eggs in Djúpivogur every year - about 78%. Papey is a small island outside of Djúpivogur. Boat trips have been established since 1995 and are scheduled from the end of May until end of August. 30,000 pairs of puffins lay their eggs every year in Papey.
The visitor centre is the beginning and the completing destination of the promenade through the area. The promenade links together the building, bird hides and viewpoints which are spread through the area.

The building provides interesting views over the area which are intended to inspire people to explore the surroundings. The focus group are tourists coming to Iceland not just for bird watching but also people who want to experience nature on their travel. Most of the tourists coming to Iceland are there for nature observation of some kind.

The area is at large wetland filled with all kind of birdlife. The area is covered with green wetland grass were birds find their shelter and on the edges there are large black beaches which provides birds with food.

The visitor centre – watching the birds is an interesting stop for travellers who want to get closer to birds, hear their sounds and observe their behaviour.
THE SITE
The site was selected because of its position to the bird watching areas. The site gives a good view over the bird watching areas and is positioned in a valley which had a potential of being the connection point between the beginning and the end of the promenade through the area.

SHAPE
The first idea was that the building would be part of the hill and the path would be going through the building. The form of the building is affected by the surrounding landscape. Its shape comes from the topography. It is tucked into the hill and flows down the hill with the landscape. The building has split level and has a firm connection to the ground.

The outer layers are thick and are cut to let in light, for making of spaces and frame in views.
THE CUTS AND EXTRUDES

The project is an interpretation of this 1800 fashion where puncture was made to the turf and new materials were added on the buildings. New and contemporary materials cut through the turf and gives the building a contemporary appearance.

VERNACULAR ARCHITECTURE

The turf houses were habited from settlement until early 20th century in Iceland. Icelandic building tradition came out of necessity and lack of materials. The Turf houses were built from the materials within reach - turf, rocks and wood. Wood was a luxury, driftwood or imported wood was used for construction. If wood was used extensively it was a sign of wealth. The buildings were covered with turf to preserve heat and because of the overall lack of materials. Each turf house differed in texture and visual appearance according to the location of the source of the material used and they truly blended in the surroundings.

The buildings changed through time. During the settlement in Iceland the buildings consisted of one large space but because of lack of materials to burn for heating and a cold period, the buildings weren’t practical enough to preserve the heat produced. Consequently the buildings began to reform into several rooms connected with narrow corridors.

Around 1800 fashion from abroad begun to influence the structure. Puncture was made through the turf layer and facades appeared. The facades turned towards the “driveway” and formed somewhat row houses. If the owner was rich enough the buildings were layered entirely on the inside with wood. The turf houses are usually described as impractical and unhealthy buildings and in late 19th and early 20th century the strain towards turf houses was very negative. Replacement became part of state-led nation building project to improve hygiene and well-being. Turf houses were abandoned and they almost disappeared.

Why using Icelandic vernacular architecture?

The buildings became unified with nature with time and could be continuing far under the earth almost without being visible on the exterior; the buildings appeared like mounts in the landscape. They were more or less hides in the ground. That was the connection I was interested in scrutinizing, the bird hides, the building becoming literally one with nature – the continuity of the building towards the landscape.

THE OBJECTIVE

The objective was to investigate the Icelandic vernacular building techniques and see if it could be exploited in modern buildings. The intention was not to make a vernacular building, instead it was more about how it could be combined and translated to modern architecture.

ADAPTATION

The buildings changed through time. During the settlement in Iceland the buildings consisted of one large space but because of lack of materials to burn for heating and a cold period, the buildings weren’t practical enough to preserve the heat produced. Consequently the buildings began to reform into several rooms connected with narrow corridors.

INFLUENCES FROM ABROAD

Around 1800 fashion from abroad begun to influence the structure. Puncture was made through the turf layer and facades appeared. The facades turned towards the “driveway” and formed somewhat row houses. If the owner was rich enough the buildings were layered entirely on the inside with wood. The buildings became unified with nature with time and could be continuing far under the earth almost without being visible on the exterior; the buildings appeared like mounts in the landscape. They were more or less hides in the ground. That was the connection I was interested in scrutinizing, the bird hides, the building becoming literally one with nature – the continuity of the building towards the landscape.
The building is the beginning and the completing destination of the promenade through the area. The building should inspire to undertake the promenade through the area, to experience and fill the senses with the views, sounds, scents and feelings of the nature surrounding the building. The building overlooks the area and is opened towards selected views.

GET CLOSER!
Bird watchers generally observe birds via binoculars from an extended distance.

The objective of the project is to make it easier to observe birds closer. Bird hides are spread throughout the area where the birds are expected to be seen. The visitor centre should include that function similarly.

Birds need peace, security, food and water to be attracted near the building.

Accordingly the building is functioning as a buffer to make the area for the birds secure and quiet.

The building opens up towards the area and makes it possible to observe the birds without the birds detecting people’s presence.
The building is a concrete building which is wrapped with turf and makes it blend in with the surroundings. Corteen steel cuts through the turf and gives the building a contemporary appearance. The thickness of the turf walls are used in the exhibition space to make small private spaces for bird watching. The corteen steel cuts through the turf walls in the service area, forming big openings and more social spaces, where bird watchers can meet over coffee and compare their notes.
Djupivogur is a seaside village in East Iceland placed on a peninsula called Berunes. The village is situated on a beautiful place between two fjords Berufjörður and Hamarsfjörður. A pyramid shaped mountain Búlandstindur rises above the village and dominates the landscape.

The area is rich in birdlife and birds are accessible within easy reach from the village for bird watchers. The area is full of marshes, ponds and beaches which are the natural habitats of many species of birds.

The establishment of Djupivogur is traced back to 1589 when traders from Hamburg got their licence to trade their products from Frederic 2nd king of Denmark but the area has been lived in since settlement (year 930). Through history trade has been a vital part for the village and during long period of time Djupivogur had the only trade harbour on the east coast.

Fishing became the main industry in Djupivogur and flourished in the 90s lead by company called Búlandstindur. The company got merged into a bigger company and in 2005 it stopped its production in Djupivogur.

Today fishing is still the main source for employment in Djupivogur but in a much smaller scale than before.
Djúpivogur is a small community of about 440 people. The inhabitants have been decreasing the last few years since fishing industry has been declining and unemployment has been increasing.

Djúpivogur is rather isolated place and it takes about 2 hours to drive to next big town in the north - Egilsstaðir (passing few small towns) and about 1 hour to next town to the south - Höfn.

Djúpivogur has although a good placement since it's placed just beside ring road one - the main road around Iceland. The ring road one is the road which most tourists travel on their way around the country and because of its isolation it's a good stopping place for gas and refreshments.

Tourism has been increasing the last few years. In the years 2003 - 2005 the town was at 5th place as the most popular stopping place in Iceland. 20% of the foreign travellers during those years went to Djúpivogur. This means that approximately 100,000 tourists went through Djúpivogur per year in the period of 2003-2005.

The municipality has been seeking for other employment opportunities by reinforcing tourism in the area. The municipality want to achieve that by emphasizing on building up good facilities for tourists. They strive for better markings on walking paths and build up good facilities for camping. Furthermore the town strives for better facilities for boats and yards including storage for boats during the wintertime and by that increasing the number of travellers coming to the town.
The number of how many tourists come to East Iceland are rather misleading. According to the graph on this page 10% of the tourists spent their time in East Iceland. According to another source 20% of travelers spent their time in East Iceland in the years 2003-2005. If we assume that the number of tourists coming to East Iceland are between 10% and 20% then about 50,000 – 100,000 people come to East Iceland every year, mostly in the summer months between May and September.

The graph on the next page shows which recreation travelers select during their stay in East Iceland. Most travelers select nature observation of some kind. Short walks outside town has the highest score amongst foreigners and Hiking amongst Icelanders.

35% of foreign tourists select bird watching as their leisure during their stay in East Iceland. Most of the tourists come for nature observation of some kind.

of foreign tourists select bird watching as their leisure during their stay in East Iceland. Most of the tourists come for nature observation of some kind.
For quite some time enthusiasts club in Djúpivogur has been promoting bird watching tourism. The website www.birds.is was established to promote bird watching in the area. No exact numbers are available of how many people come to Djúpivogur for bird watching. The only certain numbers are that every year about 600 people stay at the town’s hotel - Hótel Framtid, and are especially coming for bird watching. Andrés Skúlason, member of the enthusiasts club, believes that up to 30,000 people come to Djúpivogur between May and September in this purpose. In 2008 a small bird- and rock museum was founded in the village. The bird museum has 140 stuffed birds and gives a good idea of the variety of birds in the area. In 2009 an outdoor artwork by Sigurður Gudmundsson was revealed in the harbour. The artwork consists of 34 large scale replicas representing 34 of 57 bird species found in the area. The Djúpivogur area is a major entry and exit point for nearly all of Iceland’s migrant bird species. The area is listed as an important bird area by BirdLife International. The variety of the nature around Djúpivogur is great and plays its part in the variety of birds and wildlife in the area. About 100 species of birds lay their eggs in Iceland and 73 species every year. 57 of them lay their eggs in Djúpivogur every year - about 78%. Papey is a small island outside of Djúpivogur, boat trips have been established since 1995 and are scheduled from the end of May until end of August. 30,000 pairs of puffins lay their eggs every year in Papey. Most of the bird watchers coming to Djúpivogur are foreigners but the last couple of year’s bird watching has becoming more popular amongst Icelanders.

In the recent years improvements have been made in the area by marking paths and with some minor constructions. Two bird observation hides/cabins were built in the area to make it easier to observe the birds with closer contact.
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<tr>
<th>Month</th>
<th>Bird Species</th>
<th>Duration in Djúpivogur</th>
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<td>Jan</td>
<td>Long-Tailed Duck / Hávellla</td>
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<td>Slavonian Grebe / Flórgoði</td>
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<td>Puffin / Lundi</td>
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**Bird Watching - Hot Spots**

- **Djúpivogur Area**
- **Tjörnes Peninsula**
- **Hesteyri**
- **Reykjanesskagi**
- **Búðir**
- **Breidavik**
- **Hornafjörður Area**
- **Snaefellsnes Area**
- **Surtsey Area**

**BIRDS TO WATCH FOR IN DJÚPIVOGUR**

- **Long-Tailed Duck / Hávellla**
- **Slavonian Grebe / Flórgoði**
- **Common Guillemot / Langvía**
- **Greater Scaup / Duggönd**
- **Teal Goose / Urtönd**
- **Black-Tailed Godwit / Jaðrakan**
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- **Great Northern Diver / Himbrimi**
- **Harlequin Duck / Straumönd**
- **Puffin / Lundi**
- **BIRDS TO WATCH FOR IN DJÚPIVOGUR**
It was a cold winter’s day. It was snowing when I started my trip and the roads were icy. The ice wasn’t a problem unless it would rain.

I headed for Djúpivogur in the snow and hoped the best - hopefully the temperature wouldn’t go up.

I saw flock of reindeers on the way. They obviously didn’t have anything to eat in the mountains since they were down here.

I met Andrés Skúlason in the “kiosk” and we headed for the bird watching areas and nature reserves. The area was yellow and in its winter costume. We drove in the black sand and took a look at the area - it started to rain and I worried about my trip back home.

We took a look at the few birds there - since most species go to warmer countries during the winter.

Through the binoculars the birds were very close and it seemed like the birds were watching you straight in the eyes. It was a nice experience to see them so close.

The bird observation lasted for some time but it started to poor rain so it was time for me get back home.

It was dangerously slippery on the way back, but many hours later I made it safely back home. I think it must be much nicer to do bird watching during the summer.
The weather was still and cold when we met under Göta Elv Bridge early in the morning. I was glad I dressed up nice and warm because the sun wasn't quiet up and it was below 0°C.

The turnout was good this time with 30 people. We loaded the cars and drove off to Brunndal. We started off by taking the first peek through the binoculars in a bird watching cabin. We saw few gooses, swimming calmly on the still water. We headed further and closer to the water. It was a relaxing walk and everybody seemed in their own world with their eyes in the skies.

People stopped if they saw some thing moving in the skies or on the water and took a look in the binocu-lars. We came to a halt repeatedly and time wasn’t an issue.

We passed a hollow tree which peo-ple had learned from the internet that an owl was living in. We stood there for a moment and all of a sudden we saw head peeking through the hole. It was the first time I’ve ever seen an owl with my own eyes.

We walked some more and meet few bird photographers on the way. The walk was headed to the sea and then back to the cars. We loaded the cars again and went to Rödjan, an industrial site in Hisingen.

Even the car rides were used for bird watching - the bird watchers were constantly on a lookout and wrote notes in their book immediately when they saw birds coming their way.

We spent the day walking around and watching everything which was on our way. The bird watchers were interested in all species of birds, not just the near ones.

We ended the day by waiting for the sun to set and for an Eagle owl (other name Bubo bubo) to appear on a water tank far away from us. In about half an hour the owl appeared so all the bird wathers could go pleased and happy home.
WHAT IS A VISITOR CENTRE/NATURUM?

Visitor Centres in Sweden is a type of information centre where visitors receive information about the local area's geology, flora, fauna and cultural history. It should inspire outdoor activities and visits in the surrounding nature.

Today there are 42 visitor centres in Sweden.

We could call “Naturum” in Sweden some kind of a brand. Naturum is a registered trademark of the Swedish Environmental Protection Agency (Naturvårdsverket). Naturvårdsverket draws up guidelines for the operation of Naturums which has to be followed to be allowed to have the name Naturum.

Visitor centre should be some kind of gate to nature. The centre is to describe, explain and provide understanding for the areas values.11

Two examples of visitor centres will be studied.

Snæfellsstofa in Iceland was visited by the author in December and Tåkern in Sweden was studied, but is currently under construction and couldn’t be visited.

Naturum Tåkern is a good example to study because it’s a special visitor centre for bird watching.

Snæfellsstofa is a good example because of its rather small scale.

Visitor Centres should:

• Increase knowledge about the area
• Advise visitors on what to see and do in the area, and how it’s best to get there.
• Therefore the connections to the surroundings are very important
• Motivate visitors to use the natural area in such way that its values are preserved
• Generate an understanding of the need to preserve and cherish nature in general
• Stimulate interest in nature conservation and nature studies 11
Lake Tåkern is a lake in Östergötland County, Sweden. It is considered one of foremost bird lakes in northern Europe. The whole lake, with the surrounding beaches, has been a nature reserve since 1975. The area is closed to the public from April to the end of July except for within the visiting areas and walking routes. The building is reached by a short walk from the parking space to the main building. Visitors are by that given the opportunity to experience the nature on its way to the visitor centre. A special service road is provided not connected to the path for visitors. Outdoor toilets are stationed by the parking space. All paths are on stilts and can be taken away without much disturbance. The paths are wheelchair friendly and allow disabled people to explore the surroundings. The reception is the hub of the visitor centre and is centrally located in the building. The exhibition space continuous from the reception and is connected to a space with a view over Lake Tåkern. The main target group are the general public of all ages without any special skills. Activities in the visitor centre will consist of exhibitions, screenings of live animals, guided tours, lectures, movies, slideshows, discussions and more. The visitor centre will be opened in May 2012.
Vatnajökull National Park was established in 2008. The park encompasses all of Vatnajökull glacier and extensive surrounding area. The park covers 13% of Iceland and is the largest national park in Europe. The visitor centre Snæfellsstofa is one of three stations guarding the park.

The visitor centre is located on an isolated place in east Iceland. It’s used to guide and instruct travelers on how to act in the highlands. Two rangers work in the building and take care of the building alongside the highlands.

Unlike the Naturum Tåkern the parking space is located just outside the building. The building is entered by a ramp and you enter straight to the exhibition space. The reception and a store are located by the entrance.

The visitor centre has a good space for a permanent exhibition but no space for temporary exhibition. Having no space for a temporary exhibition could be a problem since people have no purpose of visiting the building again if the exhibitions don’t change.
The turf houses were habited from settlement until early 20th century in Iceland. Icelandic building tradition came out of necessity and lack of materials. The Turf houses were built from the materials within reach - Turf, rocks and wood. Wood was a luxury; it was either driftwood or imported. If wood was used extensively it was a sign of wealth.

The turf houses are usually described as impractical and unhealthy buildings and in late 19th and early 20th century the strand towards turf houses was very negative. Replacement became part of state-led nation building project to improve hygiene and well-being.

Turf houses were abandoned completely and they almost disappeared. Turf houses need constant maintenance and therefore the nature took over when the buildings were abandoned.

Each turf house differed in texture and visual appearance according to the location of the source of the material used.

The plans of the turf houses changed through time probably to keep heat better and protect from the cold climate.

The location of where the turf is taken is a major factor on how to build up a turf wall. The turf needs to be taken out of a swamp. It should not be over floated with water.

The turf needs to be free of sand and clay. Turf with lots of roots is the most suitable turf to be used for construction. The best time for taking the turf is during spring before the grass starts to grow.

The turf needs about 2 weeks to dry before being used for construction.

The turf house is a continuous building process, since they need constant renovation. One or more row of rocks needs to be in the foundation so the turf doesn’t adsorb the moisture from the ground.

There are few versions of turf walls and it’s categorized by how its cut from the ground:

- Strengur og Torfa
- Snidda
- Hnaus
- Klömbruhnaus

Snidda is used the grass is supposed to grow on the walls.

QUALITIES OF TURF:
- Provides good insulation
- Visual aesthetic
- Environmental qualities
- Found in the surroundings

The location of where the turf is taken through time probably to keep heat better and protect from the cold climate.
This turf house was rebuilt by Elísabet Sveinsdóttir (Stella) and her late husband Skúli Ingvarsson in 1979.

I spent part of each summer in Borgarfjörður Eystri as a kid. My parents and I often visited Stella during my childhood. She lives in the turf house during the summer. During the winter she lives in Kópavogur, which is near the capital, Reykjavík.

It was magical being inside this house as a kid and Stella the owner makes it also interesting to visit. The house is covered on the inside with wood and in every step you take there’s a creek in the wood. It’s cozy inside and warm. The house is warmed by oil stove which is kept running for heat and hot water.

Every summer tourists are attracted by this wonderful house and Stella is often woken up in the mornings by tourists peeking through her windows.