



Norwegian Nature is for Everyone

Universal Design and Outdoor Recreation



KOMMUNESEKTORENS ORGANISASJON

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Design, established in 2013. The
goal is to contribute to an inclusive
society by sharing best practices and
removing barriers.



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MINOR CHANGES, GREAT RESULTS: To make nature more accessible to all can be challenging, but sometimes it only takes ingenuity. Some slight alteration to the trail and a new accessible toilet was all it took to make a coastal trail outside Stavern in South-eastern Norway better for all: “I like the fact that nothing radical has been done, just simple adjustments to make the trail more accessible,” says Athletic Trainer Per Enok Baksjøberget – here in the company of 18-year-old Edvard Berg Jacobsen, who is recovering from an operation at Stavern Coastal Hospital. Baksjøberg uses nature as much as he can when working with his rehabilitation patients. (Photo: Fredrik Naumann / Felix Features)

Welcome to Norwegian nature!

Outdoor recreation is deeply rooted in the Norwegian identity and cultural heritage, but Norway’s deep valleys, high mountain peaks and rugged coastline are not accessible to all. That is something many people are eager to do something about.

Getting into the wild is one thing, however, we also know that ample access to outdoor recreation close to where people live has a positive effect on public health and quality of life. Accessible trails and parks, and easy access to the coastline and waterways are important, while accessible cultural heritage sites can serve as a motivation for many to get out and be active.

In this booklet, we present projects in Norwegian municipalities and counties, which have contributed to more people being able to be active and reap experiences in Norwegian nature – deep into the wild or close to where they live.

We hope you are inspired.







Part 1:

Into the Wild



Mountain hike for everyone

You can roll, be pushed or you can walk. On the universally designed path at Sognefjellet, everyone can enjoy the immense nature in Jotunheimen National Park.

“**WOW, HOW** amazing is the new path! I can’t believe we haven’t tried it until now!”

Mariann Brattland (41) routinely maneuvers her wheelchair, smiling at fellow hiker Inger Marie Bleka (66), who walks alongside her at a fast pace using walking poles.

We meet the two happy ladies, mother and daughter from Vågå, at The Norwegian Trekking Association’s cabin named Sognefjellshytta, on the mountain pass 1 410 metres above sea level, midway between east and west in Norway. Here the landscape opens up with a magnificent view of glaciers and high mountain peaks in Jotunheimen. To the southwest: the mountain Fanaråken and Fanaråkbreen glacier. To the east: Smørstabbreen glacier surrounded by a ridge of peaks. Norway’s highest mountain Galdhøpiggen is not far away, but is not visible from this point.

“Galdhøpiggen is often difficult to spot, it’s sort of hidden,” says Mariann Brattland. She knows these mountains like the back of her hand. She and her mother have been to the mountainous area Sognefjellet many times, but not after the new hiking trail was ready in 2018.

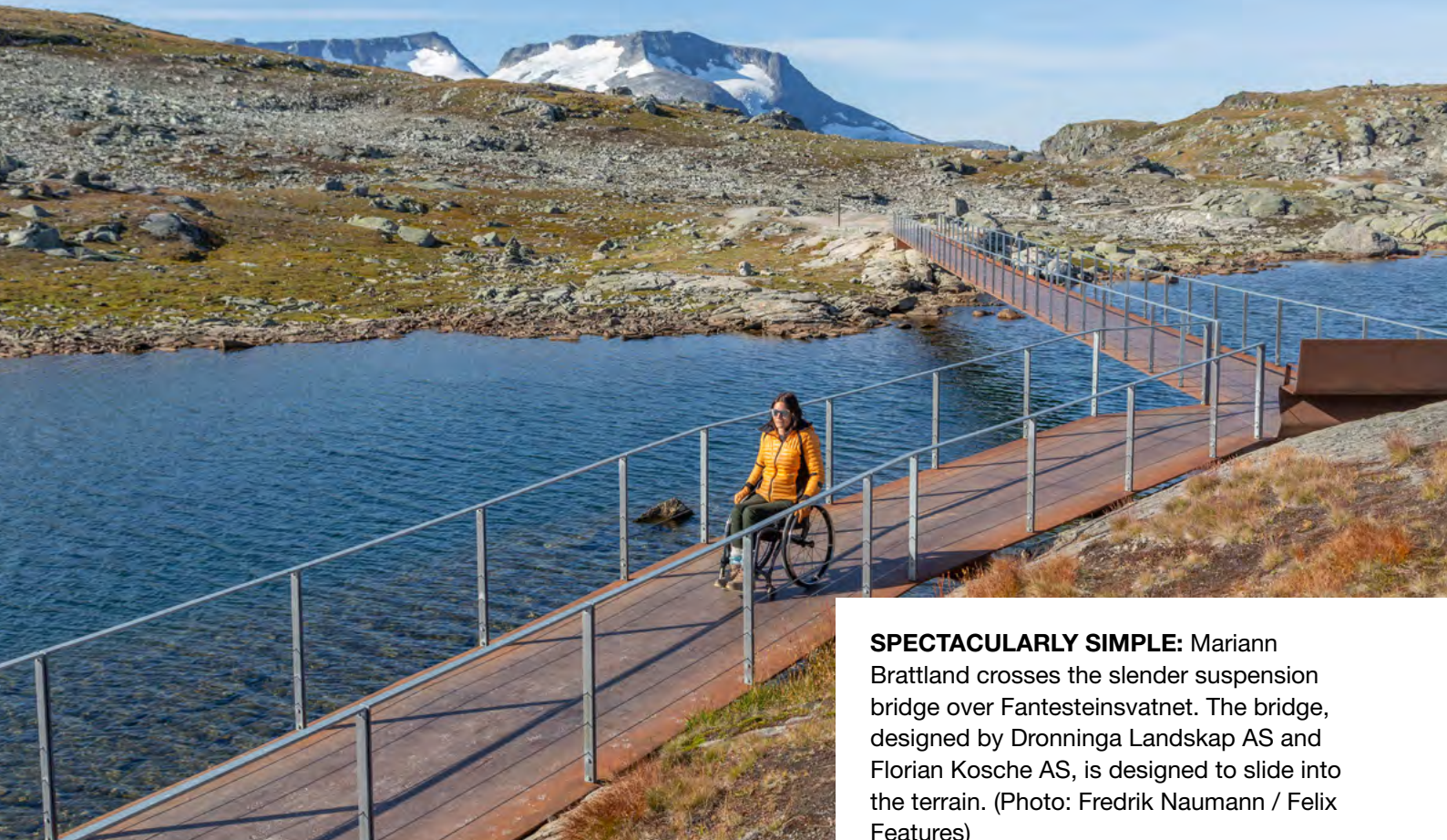
The project, called Innfallsport (“Gateway”) Jotunheimen National Park, is a pilot project managed by the Norwegian Environment Agency and the National Park Board. The goal is to

lower the barriers for getting out into nature. Previously, hikers had to start the hike into the mountains by walking along a trafficked road. For wheelchair users it was practically impossible to get out into the terrain.

IN STEP WITH NATURE

Today the path goes from Sognefjellshytta, crosses two bridges and passes along the lake Fantesteinsvatnet. The path is 1.1 kilometres long, universally designed and developed with minimal slope making it possible to roll, be pushed and walk the route. The path is between one and two metres wide, laid with local gravel and stone, and it is adapted to the terrain to avoid “scarring” the landscape. The steel bridges are also designed to blend in with nature: The longest bridge, a suspension bridge, is 47 meters long, but still ultra-thin, only two centimeters thick.

The new path connects to existing trails further inland in the mountains, where hikers can continue on other routes. Those who have to stay on the universally designed trail, can either turn around and take the same route back to Sognefjellshytta, or continue on a route that ends with a trail that parallels the trafficked road, county road 55.



SPECTACULARLY SIMPLE: Mariann Brattland crosses the slender suspension bridge over Fantesteinsvatnet. The bridge, designed by Dronninga Landskap AS and Florian Kosche AS, is designed to slide into the terrain. (Photo: Fredrik Naumann / Felix Features)

OFF THE TRAFFICKED ROAD

Mariann Brattland is excited after her first hike.

“This hiking trail works great with a wheelchair,” she says.

“The climb is not too steep, and the surface is easy to roll on.”

“Is the hiking trail a bit short with its 1.1 kilometres?”

“No!” She answers readily and explains:

“The route is long enough for me to be satisfied. The most important thing is that I get away from the trafficked road and out into the terrain. Very often I find that the only option for me is to roll on the road alongside cars, and it feels neither safe nor particularly nice.”

Mariann Brattland stresses that wheelchair users and disabled people are individuals with varying abilities.

“People have different prerequisites.

For many, this hike will be more than demanding enough,” she says.

LONG FIGHT

Ten years have passed since the accident when Mariann Brattland’s hang-glider crashed to the ground during landing in her hometown Vågå. In a few seconds, the young mother’s life was turned upside down. Her back was broken. Three of her vertebrae were completely crushed. She was paralysed from the chest down. At Sunnaas Rehabilitation Hospital, she received the brutal message that it would take five years to retrain her body to master her new life in a wheelchair.

“Five years! I thought ‘no, no, no!’ . For me, who is very impatient, this was impossible to imagine,” she says.

“And how long did the training take?”

“Seven years.”



OUT AND ABOUT: “It always feels good to get outside into nature, both physically and mentally,” says Mariann Brattland. (Photo: Fredrik Naumann / Felix Features)

A WELCOME BREAK: The picnic area at the starting point of the hiking trail is also universally designed. One side of the table is without a bench, so that wheelchair users like Mariann Brattland can move right up to and under the table, while Inger Marie Bleka can take a seat on the bench on the other side of the table. (Photo: Fredrik Naumann / Felix Features)



She knew she wanted to get out into nature after the accident. But she was forced to take it gradually. On her first trip she rolled her wheelchair 100 metres and was completely exhausted afterwards. The first night out in a tent took place at home in her own garden. These days, she embarks on proper camping trips. She rides a hand bike. Uses a sledge with skis as runners. And not least: In recent years, she has been back up in the air again. The hang-glider has been left on the ground, but she has completed her pilot's licence and can fly a glider, specially adapted with all the control in hand levers.

“I love flying,” she says.

“But for me it's not about chasing an adrenaline kick. It is about challenging myself and feeling empowered. As a wheelchair user I have the feeling that no one expects much from me – and so I have to set my own ambitions.”

PEAK HIKE AGAINST ALL ODDS

This spring she hiked to the top of Galdhøpiggen for the first time after the accident. She was challenged by her son, who is now 15 years old:

“Mum, you used to love hiking to the mountain peak. Do you want to join us if we pull you up?”

She sat in her ski sledge and they took the “easy” route up, from Juvasshytta across Pigg-green glacier. As they approached the top, the snowy patch ended and she had to be carried over the steep rocky outcrop.

“It was a fantastic family trip, but very heavy for those who pulled me. They haven't asked me if we should do it again,” she laughs.

Mariann Brattland is ambivalent about being presented as a sporty wheelchair user who fixes everything and ends up on the front page of the local newspaper, as she did after the hike to Galdhøpiggen.



”It’s about challenging myself and feeling empowered.”

MARIANN BRATTLAND

IMMENSE LANDSCAPE: The universally designed trail winds from Sognefjellshytta, over Fantesteinsvatnet and through the landscape, 1410 metres above sea level. (Photo: Fredrik Naumann / Felix Features) ↓

“I would rather that people see the barriers to venturing out into nature as low. Today, with all the social media posting, I think many people get the impression that the best outdoor experiences are extreme. This puts a lot of people off, including many who are non-disabled.”

Her wheelchair easily fits under the table in the picnic area outside Sognefjellshytta. She pours coffee from a thermos.

“I have changed after the accident. Before I used to always want to reach the highest peaks. Today, I have become better at finding trips closer to home and enjoying them. I don’t take for granted that I am able to get outside on my own, without assistance, as I have today. And I’m grateful for that. Just being able to sit here, out in nature, and drink my coffee, is a fantastic experience.”



She adds: “On certain days it can be hard to motivate myself to go outside. But I have to. If I can’t get outside at least once a day, I get moody.”

SIGNAGE IS VITAL

There is an ongoing discussion about whether nature should be developed and facilitated so that more people can use it. Mariann Brattland thinks the hiking trail at Sognefjellshytta has been solved in a good way.

“They have found a good compromise. No major interventions have been made that ruin the nature experience, but the adjustments make it possible for me to get out into the terrain and not just roll on a paved road. I need these experiences too, but of course I understand that there will never be a universally designed path up to Galdhøpiggen.”

She will happily recommend the hiking trail at Sognefjellshytta to others. She still has one tip on how the destination can be even more accessible: Clearer signage starting at the parking lot.

“It was a bit difficult to figure out how to get from the parking lot to the starting point of the hiking trail itself,” she says and explains:

“I am always afraid of getting stuck with the wheelchair, especially if the terrain is a bit hilly. It is important for me to know where I am going, and it would be helpful with a sign that showed the way to the hiking trail. Wheelchair users and other disabled people need much more information to feel safe, than non-disabled people.” She had no problem finding her way from the picnic area in front of Sognefjellshytta.

“There is a clear sign with a wheelchair symbol, which makes it very clear that this walking route is also for ‘people like me’,” says Mariann Brattland.



RETURN TRAIL: The hiking trail is 1.1 kilometres long – enough to get off the trafficked road and out into the wild. (Photo: Fredrik Naumann / Felix Features)

Gateway to Jotunheimen National Park

- On Sognefjellet, 1410 metres above sea level
- Universally designed hiking trail of 1.1 km
- Stepless route without steep inclines, suitable for everyone who rolls and walks
- Starts at Sognefjellshytta, goes over and along Fantesteinsvatnet
- Picnic area with benches, tables and information about Jotunheimen National Park
- Accessible toilet at Sognefjellshytta
- Completed in 2018
- Builder: The National Park Board and the County Governor of Innlandet
- Landscape architect: Dronninga Landskap AS
- Partners: Sognefjellshytta, the State-owned Land and Forest Company (Statskog) and Norwegian Scenic Routes



EVERY DEGREE COUNTS: Solvei Harila Skjold (left) has not lost her mobile phone – she uses an app to measure the gradient and slope of the trail. “On a sloping trail you roll on an angle. It can be terribly uncomfortable,” explains Annett Eidsvåg Garvik. (Photo: Fredrik Naumann/Felix Features)

Leads the way for hikers on wheels

To get more wheelchair users to explore the outdoors, two enthusiasts on wheels map and measure trekking destinations in Bergen and the surrounding area.

“Let’s stop! Shall we measure?”

Annett Eidsvåg Garvik and Solvei Harila Skjold roll down one of the trails from Mount Fløyen at high speed on their wheelchairs. They are stopping below one of the countless hairpin bends. The trail is not only steep, but the gravel surface has also suddenly become quite rocky and sloped. Solvei flips out her mobile phone and places it on the ground. There is an app for everything, and she has opened the app

“Clinometer”. It measures the gradient and slope of the trail.

“On a sloping trail you roll on an angle. It can be terribly uncomfortable,” Annett explains. “When you use a wheelchair, rolling downhill can be just as challenging as the climb.”

HIGH BARRIERS

The two trekking buddies are in charge of the project “Ten wheel treks around Bergen” for the Norwegian Trekking Association (DNT). Each year, they map ten different treks that are suitable for wheelchair users. Information with pictures,

film clips and detailed descriptions of trekking destinations and trails is published on ut.no, the largest hiking database in Norway.

“I love trekking, and it’s nice to help make the outdoors more accessible for others,” says Solvei. “It has been difficult for people to find out whether destinations are suitable for wheelchairs – this information was not available before,” she says. Annett stresses that good information is essential for wheelchair users who need answers to very basic things: What kind of surface is on the trail? Could I get stuck? Is there a risk of slipping? Are there any high edges along the route? Are there accessible parking and toilets nearby?

“The barriers for getting out are often high when you have a disability. By producing information that makes it easier and safer for people, we hope to reduce some of the barriers,” she says. Solvei nods and adds:

“I know many wheelchair users who do not dare to go for a trek. Many have had negative experiences on trips that did not work out.”



HIKING: In just a few minutes, Annett whizzes from the centre of Bergen up to Mount Fløyen, a popular starting point for some good hikes. The cable car and all the stops are facilitated for prams and wheelchair users. There is space for a maximum of three wheelchairs or prams on each departure. (Photo: Fredrik Naumann/Felix Features)

GOOD FOR BODY AND SOUL

Solvei is a psychologist at Bergen Health Authority and specialises in treatments for anxiety. She is convinced that getting outside is important for people's mental and physical health.

"We know that being active and outdoors reduces anxiety and depression, as well as prevents physical illness. It means a lot to most people, and people in wheelchairs are like most people," she says.

She grew up in an outdoorsy family, and early on learned the joy of challenging her limits. "The empowerment you feel when you finally reach a destination or up a mountain peak, you can bring to other contexts. You dare to explore new activities," she says.

KNOW THE PROBLEMS FIRSTHAND

Annett and Solvei believe it is important that the treks are mapped by wheelchair users. They have both experienced that treks labelled



USEFUL TOOL: Precise measures are needed when mapping the treks. A GoPro camera on the wheelchair and a mobile app for measuring the gradient of trails are both useful tools. (Photo: Fredrik Naumann/Felix Features)

'wheelchair-friendly' can be anything but.

"For pedestrians, it can be difficult to imagine how a footpath works on wheels. As wheelchair users we are able to give more precise descriptions. We simply know better what challenges we face and what to look out for," says Solvei.

VARIETY OF TREKS

They point out something that should go without saying, but is often ignored: Wheelchair users are just as different as any other people.

"We are not a uniform group, not even when we go for a hike," says Annett.

"Physical condition and strength can vary just as much for us as for others. What is an easy trip for some can be very strenuous for others."

She smiles and chooses an example she knows well:

"Solvei is a tough-as-nails, outdoorsy person who embarks on long treks and gets around every-



HIGH ABOVE THE CITY: Bergen’s most famous viewpoint, Mount Fløyen, 320 metres above sea level. The viewing platform is facilitated for wheelchair users. (Photo: Fredrik Naumann/Felix Features)

where. I, on the other hand, am happy to go for a hike, but I’m not quite as passionate,” she laughs. Needs and preferences are different. That is why they try to publish as accurate descriptions as possible, so that people can judge for themselves whether the hikes are suitable for them. For the same reason, they try to promote destinations with varying degrees of difficulty.

“We choose ten trips a year, and try to include the whole range: From the easiest trips, where you can bring your great-grandmother, to the more challenging routes, that are not suitable for everyone without the right equipment or assistance,” says Annett.

In the information they provide, they usually write what equipment is needed. A light, manual wheelchair, for example, is not the same as a powerful, electric one.

TOUGH SUMMIT TRIP

Among the ten hiking destinations that Annett

and Solvei mapped out and published in 2022 was the popular hike from Mount Fløyen to Rundemanen, one of the seven mountains around Bergen. The trek is 7.2 kilometres long, has an ascent of 305 metres in total, offers a lovely view from the top and has been labelled ‘demanding’.

“Solvei is able to do the trip on her own. She takes a long time up, and a much shorter time back down,” Annett reveals with a laugh.

“Are we talking about reckless driving?”

“She doesn’t call it reckless driving, but I do!” Annett also enjoys shorter, easier forest walks, but says the trip up to Rundemanen was a particularly great experience – even if she needed help and was very tired afterwards. Many have been tempted to try this hike. Digital check-ins in the app show that Rundemanen was the most popular of the ten recommended trips in 2022. “That’s fun, and tells us that wheelchair users want to be challenged,” says Solvei.



A wet and wild experience

Can you leave Skjervsfossen waterfall in Granvin with dry feet? You have to find out for yourself. Whether you get there on four wheels or two legs.

“**SOMETIMES** you can get a proper shower here,” says Bjørn Egil Tolås.

We have reached the point that has been named, tellingly, “The Shower”. Above us towers Skjervsfossen, one of the Vossa region’s many spectacular nature attractions. On this particular day, the water trickles calmly after a hot and dry summer. But when spring thaw sends melt water down the cliff, it rumbles like thunder.

Bjørn Egil was diagnosed with spinal muscular atrophy as a teenager. For a young man who loves to be active in nature, it was hard to receive the message that his body’s muscles would gradually weaken.

“It means a lot to me to be able to access nature experiences like this without having to plan every step, be afraid of falling or having to ask for help all the time. Being able to travel here by myself and be independent makes a

huge difference,” says the 29-year-old.

He can get around on crutches where the terrain is flat and safe, but usually relies on an electric wheelchair. Or a quad bike. Or even a six-wheeler. Using an ATV he can travel along forest roads far up into the mountains.

“If you can’t be active, it affects your mental health. Your mental and physical health are equally important,” says Tolås.

He is a trained wood carver, is politically active and passionate about bringing local young people with various challenges outdoors to experience empowerment and the joy of nature.

FOCUS ON WELLBEING

It all started with a project to develop a picnic area at the top of the waterfall. There were few places to stop along the hairpin turns, and Skjervsfossen was difficult to access for both



ACTIVE ON WHEELS: Bjørn Egil Tolås loves nature and activity. “It doesn’t always take so much to give people better access to the wild. Often, there are small simple steps, such as building gravel roads, perhaps with an extra turn around a knoll. Sometimes it’s a matter of utilising natural elements that are already there, like here at Skjervsfossen.” (Photo: Fredrik Naumann / Felix Features)



“Being able to travel here by myself and be independent makes a huge difference.”

BJØRN EGIL TOLÅS



locals and tourists. Østengen & Bergo Landscape Architects saw several possibilities:

“We thought that it would be fantastic to move down along the waterfall and feel the water spray,” says landscape architect Kari Bergo, who was in charge of the project.

The landscape architects proposed to create universal access both at the top and bottom part of the waterfall, with a stone staircase that connects the two via several vantage points. And so it was.

“We wanted to create a nice space that can be enjoyed by everyone, whether you are in a wheelchair, non-disabled or visually impaired.

That is what universal design is all about,” says Bergo.

Today, those who depend on wheels can experience the waterfall from both the top and the bottom. Extreme sports enthusiasts can rappel down the waterfall. Hikers can get a good workout for their thighs climbing the stone stairs that bind the upper and lower part together. If you need a breather on the way up, there are benches both along the stone stairs and the universally designed trails.

CAREFUL INTERVENTION

The landscape architects did not want railings,



CAREFUL INTERVENTION: Nature plays the lead in Østengen & Bergo Landscape Architects' careful planning of the universally designed access to Skjervsfossen. (Photo: Fredrik Naumann / Felix Features)

NATURAL ORIENTATION LINES: By utilising the environment, the landscape architects created natural orientation lines. Green nature against dark asphalt provides a visual orientation line, beautiful kerbstones a physical one. (Photo: Fredrik Naumann / Felix Features)



high walls or other construction in the lower part. It would ruin the experience of wild nature.

“This is always a balancing act. Too much facilitation spoils the experience, and is not good universal design. At Skjervsfossen there were areas where we could increase access, and other areas where it would be wrong,” Bergo explains.

They went to work, starting with a comprehensive landscape analysis. The result, which was ready in 2016, is an area where the universally designed trails meander in harmony with nature. The orientation lines are natural, dark kerbstone in contrast to the lush nature. The

paved path does not rise too high in the terrain, making it safe without railings. A stone staircase built by Sherpas from Nepal winds gently through scrub forest and around boulders. Nature is allowed to play the lead.

“There are so many experiences at Skjervsfossen,” Bergo says enthusiastically.

In some places you hear the waterfall, in other places you see it. When you come right up to it you can also touch and feel it. There is a lot of interesting geology and history associated with the waterfall, which visitors can read about on small plaques scattered around the landscape. The beautiful accessible toilet building in



FUN FOR EVERYONE: In the Vossa region, outdoor activities play a major role – preferably of the extreme kind! Skjervsfossen has a stone staircase built by Sherpas from Nepal leading from the bottom to the top, and is a popular spot for exercise. (Photo: Fredrik Naumann / Felix Features)



ALWAYS ON THE MOVE: When he is not renovating his house in Evanger, Bjørn Egil Tolås is often on the move. Vehicles are his passion. (Photo: Fredrik Naumann / Felix Features)



“I don’t think people take notice of the fact that this is a universally designed space when they come here. It just is. Then I think we have succeeded.”

KARI BERGO

the picnic area, clad in slate and with a view to trickling water, won the Small Spaces Award for its unique architecture in 2016.

FEELS NATURAL

“I don’t think people take notice of the fact that this is a universally designed space when they come here. It just is. Then I think we have succeeded,” says Kari Bergo.

Bjørn Egil Tolås agrees:

“It is important that facilitation is done in a way so that you don’t feel separated. The facilitation should fit in naturally.”

He hopes to see more projects like Skjervsfossen, where Norway’s wild nature will be accessible for more people, without too much intervention.

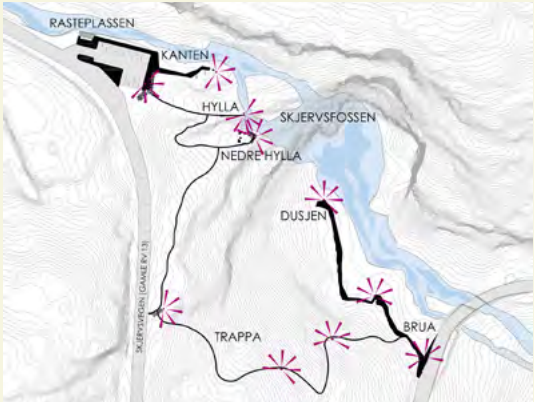
“We are born to live close to nature,” says Tolås.

He describes the feeling of freedom he gets when being in close contact with the elements, moving in three-dimensional nature, feeling the rocks and vegetation, and experiencing rugged terrain.

“My best nature experience? When I tried paragliding for the first time, I got to see the landscape from a bird’s eye view. I felt such a rush of adrenalin!”



PARTICIPATION: Bjørn Egil Tolås encourages Norwegian municipalities to involve more disabled people when new areas are to be universally designed. (Photo: Fredrik Naumann / Felix Features)



NATIONAL TOURIST ROAD
The road past Skjervsfossen waterfall is part of the National Tourist Route Hardanger, one of 18 selected stretches in western and northern Norway that have been facilitated to give everyone access to the experiences along the way. Hardanger National Tourist Route consists of four sections of a total of 165 kilometres. Granvin-Steinsdalsfossen (road 79/49), where Skjervsfossen is located, is one of them.

Illustration: Østengen & Bergo Landskapsarkitekter

Full speed on tough hiking trails

A floating bridge over the sea. A passage cut by wire saw through the rock: Untraditional methods were used to create a spectacular path by Hafrsfjord.







THE THREE-WHEEL BIKE IS BRAND NEW

and shiny red. Othilia got it for her third birthday. She proudly sets off on the new walkway, which is literally a stone's throw from the sea.

"This trail is a superb intervention. Both now that she wants to ride a bike, and when we wheeled her in a stroller," says her father, Claus S. Petersen. Claus works in Stavanger Municipality as a parks and roads architect, and is a member of the Universal Design Contact Network of The Norwegian Association of Local and Regional Authorities (KS) – but has not been involved in this project.

CUT THROUGH

Two years ago, the new, last part of the path

opened in an area that was previously almost impassable. For a long stretch, it was easy. But all of a sudden there was a stop: Steep rocks and the sea, as well as a military shooting range. How to solve it? Using a floating bridge over the water! A second bridge on the outside of the rock. And by literally cutting a passage through the rock.

The hiking trail starts by the "Sword in the mountain" – a nine metre high monument that was erected in memory of the battle of Hafsfjord. It was here that King Harald Hårfagre, around 872, sailed into the fjord. He fought down local kings, united western Norway – and thus all of Norway.

In 2016, the spectacular part of the hiking



NEW BIKE: Othilia got the red bike for her third birthday. (Photo: Fredrik Naumann / Felix Features)



MUCH USED: The hiking trail has become a favourite for many. (Photo: Fredrik Naumann / Felix Features)

trail was opened. This part of the walking route has cost Stavanger municipality NOK 14 million. And with it, the recreational area project is approaching its goal: A coherent, green hiking network, around twenty miles in total. Over the years, the municipality has secured about 2000 acres of recreational areas. It has not been an easy feat.

“On the one hand, you have the community’s wishes and need for a walkway. On the other, you have those who do not want a path crossing their beach property,” says Stig Wathne, advisor for the Stavanger Municipality real estate unit.

“The community’s need for paths that can be used by everyone, is strong in Stavanger. Through negotiations the matter was resolved

in the end. The separation between the hiking trail and private properties is marked in several places with markers made of local stone called *rennesøystein*.

CHALLENGES

The biggest technical challenges were the large rocks and inaccessible terrain.

“This had to be solved to create a path that is accessible to everyone. We had in mind that grandparents, mothers, fathers and children should be able to use this area, regardless of their functional abilities. The path should have a good surface and not be too hilly. And we did it.” The width of the path varies.

“In some places it is three metres, while

other parts were negotiated by property owners down to one and a half metres,” says Wathne, and shows us a place where the path used to come to a full stop for most hikers.

CARRIED HIS BIKE

Not so for Lars Tveter, who has taken his grandchildren – twins Henrik and Joakim – for a bike ride. The sporty pensioner used to find his own solution.

“I should perhaps not tell you how I cheated, but I used to carry my bike up this steep slope, and come down on the other side. But it would have been difficult for the boys, and would have complicated the trip,” he says, adding:

“I used this path before it was officially opened,” he laughs, very pleased with the result:

“This path is absolutely amazing! We waited a long time for it. With the new network of paths we can start here, ride our bikes on to the Tanangerbroa bridge, and further on to the Alexander Kielland Memorial. The path is close to home, which makes it possible to get out quickly. It is flat and safe for the boys.”

On this particular day, Tveter is testing out his new bike.

“It can be taken apart and carried on the back.”

Tveter likes to keep fit, and works out on average seven kilometres a day.

“I use my bike or my legs. I work out enough to take part in Birken (a cycling event of 86 kilometres), but I am starting to feel my age. I’m 67 years old, and the older you are, the more important it is to stay fit. But it is important to stay at your level, not to pretend that you are 27.”

ADDED BONUS

The new trail gives him not just the exercise, but an added bonus:

“The fantastic bridge architecture is a visual experience. Friends of ours are geologists. They



like to stop where the rock has been cut through, to look at the different layers. It brings an extra dimension.” Stig Wathne agrees.

“It’s awesome! They have cut right through the rock, 25-30 metres inwards, and maybe ten metres down. Huge amounts of rock have been removed.”

AWARD

The project has received an award for good lighting. Both bridges have recessed lights in the railing, the smallest also has lights in the wooden deck facing the cut rock. On the stretch where the path passes through the cliff, there are mounted skylights. In addition, there is regular outdoor lighting.

Wathne’s only concern is the slope of the path through the passage.

“I have wondered if it slopes a bit too much,



HAPPY TRIO: Grandpa Lars and eight-year-olds Joakim and Henrik on a bike ride. (Photo: Fredrik Naumann / Felix Features)



“I should perhaps not tell you how I cheated, but I used to carry my bike up this steep slope, and come down on the other side.”

LARS TVETER

but I have not heard any complaints so far. We have only had positive feedback.”

The praise has not only come from the many enthusiastic users of the trail. In 2017, Multiconsult was honored with the DOGA (Design and Architecture Norway) Award 2017 for good design and architecture for the new path and bridge along Hafrsfjord.

“They have shown respect for the landscape and focused on highlighting it, instead of trying to beautify it. This is a very successful cultivation of a lovely landscape, which testifies to a good understanding of the uniqueness of the space and a willingness not to choose the path of least resistance”, reads the reasoning of the jury.



Self-serviced cabins at the mouth of the fjord

The Haugesund Trekking Association's cabins called Flokehytterne, outside Haugesund, are built so that everyone has the opportunity to spend the night in fantastic nature and architecture. Wheelchairs are no obstacle.





“PEAK HIKES AREN’T FOR EVERYONE. We still believe that everyone should get outside and enjoy nature, and so we have to facilitate to make it happen,” says Audhild Sannes of the Haugesund Trekking Association.

The five self-serviced cabins are located at the far end of the coastal rock slope at Ryvarden lighthouse in Sveio, right out on the mouth of the fjord. They are managed by the Haugesund Trekking Association. Non-disabled guests will have to walk the last kilometres to the cabins, but if you need to drive all the way, you can get a permit from Sveio Municipality.

Audhild Sannes leads the way along the wooden walkways that lead to the cabins.



“When spaces are universally designed, you feel more on par with everyone else. At Flokehytta I didn’t need help with anything. ”

GRO EILERAAS



SMART DETAILS: The benches that run along the panoramic windows can also be used as beds. During the day, the bedding is hidden under the benches. “Practical and easy,” says Audhild Sannes in the Haugesund Trekking Association. (Photo: Fredrik Naumann / Felix Features)

They are built to safely maneuver wheelchairs, walkers and prams.

IN THE MIDDLE OF NATURE

The entrances are narrow. But once indoors, the cabins become wider and open up to the sea. The entire end wall consists of panoramic windows with unobstructed views of the North Sea and the exposed stretch called “Sletta”. Sitting on the sofa, you have the feeling of being in the middle of nature. If you are lucky, you can see porpoises and sea eagles passing outside.

“You don’t get any closer to the sea when you build a cabin,” says Audhild Sannes.

“The cabins are verging on the limit of what

is possible. When the storm takes hold, the waves come crashing against the windows,” she says.

The cabins were completed in the autumn of 2020. They were designed by architect Roald Bø in Holon Arkitekter, on behalf of the Haugesund Trekking Association. They are built so that they do not leave lasting marks in the landscape. The cabins stand on pillars that are wedged down into the rock. There was no need for blasting, leveling or ditching to get them in place.

NORRØN HISTORY

The modern cabin project is named after the legendary Viking Floke Vilgerdsson, who sailed

from Ryvarden in the year 869 and became one of the first to settle in Iceland. Four cabins are the same size and are named after Floke's circle; mother Vilgerd, daughters Geirhild and Tjodgerd, and friend Faxe. The fifth cabin is named Horda-Kåre after his grandfather. It is twice as big as the others and universally designed. This cabin has accommodation for ten people, while the smaller cabins can accommodate five guests.

SMART DETAILS

Gro Eileraas tested the cabins on an overnight trip with friends last autumn.

"It was magical. I slept underneath the

window, and it was a unique experience to watch the wet and windy weather while the ships sailed past in the dark of night."

As she uses a wheelchair, her friends had booked the larger, universally designed cabin. It worked perfectly for her.

"The kitchen is so smartly fitted out that it almost worked better than my own kitchen," she says. She also liked how the bathroom was decked out:

"There are good handles on each side of the toilet, a sink you can roll under, mirrors placed so that you see more than just tufts of your hair, and low pegs to hang your towel on without

A ROOM WITH A VIEW: There is plenty of wheelchair space in the larger cabin. (Photo: Fredrik Naumann / Felix Features)



TO THE LIGHTHOUSE:

The five cabins are located by Ryvarden lighthouse in Sveio outside Haugesund. The cabin closest to the lighthouse is twice as big as the others, universally designed and accessible for everyone. (Photo: Fredrik Naumann / Felix Features)



NO OUTSIDE LAVATORY: The cabins have accessible toilets with enough space to move the wheelchair under the sink. (Photo: Fredrik Naumann / Felix Features)

having to ask for help from others. You really notice how universal design is integrated in every detail.”

These are features that the trekking enthusiast from Sveio does not take for granted. She travels a lot and often experiences practical problems in hotels and other accommodation.

“When spaces are universally designed, you feel more on par with everyone else. At Flokehytta I did not need help with anything, which is quite unusual when I travel,” she says.

POPULAR CABINS

The cabins have been fully booked every day since their opening in the autumn of 2020, including Christmas Eve and New Year’s Eve. Gro Eileraas and her friends have already booked their next trip, this autumn.

“It might become a tradition,” she says.

“We particularly enjoy the rough weather.”



Walkway on Norway's roof

At the foot of Galdhøpiggen, 1850 metres above sea level, in a barren and rocky landscape characterised by permafrost and frequent visits by the most angry weather gods, there is a universally designed walkway the likes of which you have never seen.





“We lacked a mountain destination that could be enjoyed by everyone.”

SANDER SÆLTHUN

THE MOUNTAIN TOWN OF LOM is the epicentre of some of the wildest and most beautiful nature Norway has to offer. The municipality contains three national parks: Jotunheimen, Breheimen and Reinheimen – as well as Galdhøpiggen and Glittertind, Norway’s two highest mountains.

The municipality can also offer the country’s most spectacular universally designed hiking trail. The 1.1 km long walkway over the plateau Juvflya to the ice tunnel in Juvfonne has opened up the mountains – and the history of the climate in Norway – to completely new groups.

“When we have school classes visiting with students in wheelchairs, it is incredibly fun to see that everyone can participate,” says Dag Inge Bakke. He works as a nature guide at the Climate Park 2469, an outdoor adventure park focusing on the history of the climate, hunting and trapping. The ice tunnel, where the public is invited right under the 7000-year-old ice, is the park’s highlight.

“In addition to disabled people, we have had several older people and families with prams visit since the walkway opened in 2014, Bakke continues.

A NEW MOUNTAIN DESTINATION

Tampering with Norwegian nature used to anger outdoor enthusiasts. But there is a growing understanding that it is both possible and desirable with interventions that make untouched natural treasures accessible to more people.



“We lacked a mountain destination that could be enjoyed by everyone,” says Sander Sælthun in Lom Municipality.

“Interventions had already been made in this landscape, including a new cabin built by the Norwegian Trekking Association, a summer ski centre and Norway’s highest road. This made it easier to justify such a project,” Sælthun continues.

“We wanted to build a walkway that could be removed without a trace,” Bakke adds.

And so it was. In fact, the walkway helps to reduce wear and tear on the landscape. Everyone chooses the walkway, since the terrain is difficult to navigate.

IN SYNC WITH NATURE

The walkway traverses a so-called polygonal



SPECTACULAR IN LOM: The walkway at Juvflya in Lom Municipality was nominated for the Innovation Award for Universal Design by Design and Architecture Norway (DOGA) in 2014, and received honourable mention. The jury highlighted the innovative interventions to make it easier for more people to explore the mountains. In 2017, the project was honoured with an international award: Design for the All Foundation Awards Trophy. (Photo: Landskapsfabrikken AS and Espen Finstad / Klimapark 2469)

ground, shallow troughs with geometric patterns that are formed when the top layer of the permafrost freezes and thaws on top of each other.

Fiberglass gratings are placed gently in the landscape, based on an accurate aerial scan of the terrain, so that the climb is a maximum of 1:20 (one metre per 20 metres). The non-slip gratings are fixed into block stones, which are naturally anchored in the permafrost and edged with ore-pine. The wooden edge acts as an orientation line for the visually impaired, by being elevated and casting a shadow.

A yellow contrasting colour, which reflects the colour of the lichen on the stones, signals an upcoming flat area with information boards. The edge also prevents prams, walkers and wheelchairs from rolling downhill.

“To take part in opening the mountains

for more people has been absolutely fantastic,” says Andreas Nypan in Landskapsfabrikken AS, who has designed the walkway.

“The facility is visible, but does not appear as unsightly or disturbing in the landscape. The graying wood and the gray fiberglass gratings blend well into nature. The yellow gratings provide good orientation and the opportunity for distance assessment for all users, Nypan continues.

He commends Lom Municipality for visionary planning, flexibility and community goodwill throughout the project phase.

The article first appeared in the magazine “Viser vei til et samfunn for alle” (2018). Revised in 2021.



Universal view from Trollstigen

What do you do if you can't rebuild an existing vantage point so that everyone has access to it? You build another!

THE FAMOUS serpentine mountain road and pass Trollstigen in Møre og Romsdal is one of Norway's most visited tourist attractions, but for a long time it was anything but accessible to everyone.

So when the Norwegian Public Roads Administration and Norwegian Scenic Routes

upgraded this tourist magnet in 2012, they decided to build brand new walkways and a completely new vantage point, since the original was based on a staircase solution on which it was not possible to achieve universal design.

“We ended up with two vantage points! Both offer a formidable view of the mountains and



NEW VANTAGE POINT: The vantage point at the plateau is accessible for wheelchair users. (Both photos: Jarle Wæhler / Statens vegvesen. Architect: Reiulf Ramstad Arkitekter as / Landscape architect: Multiconsult).



NEW WALKWAYS: Safe and accessible paths lead to the vantage points at Trollstigen by the Norwegian Scenic Route Geiranger-Trollstigen.

Isterdalen valley,” says Grete Kongshaug.

She currently works as a consultant in the Møre og Romsdal County Council, but previously worked in the Norwegian Public Roads Administration while they upgraded the Trollstigen facilities.

“You’ve probably been to both. Are they equally good?”

“Most definitely! In addition, we built a new walkway with access for wheelchair users and disabled people, and the parking lot was upgraded.”

New accessible toilets and a new cafe were also built.

She says that they have received a lot of praise after the upgrade, both from people with reduced mobility and others who generally

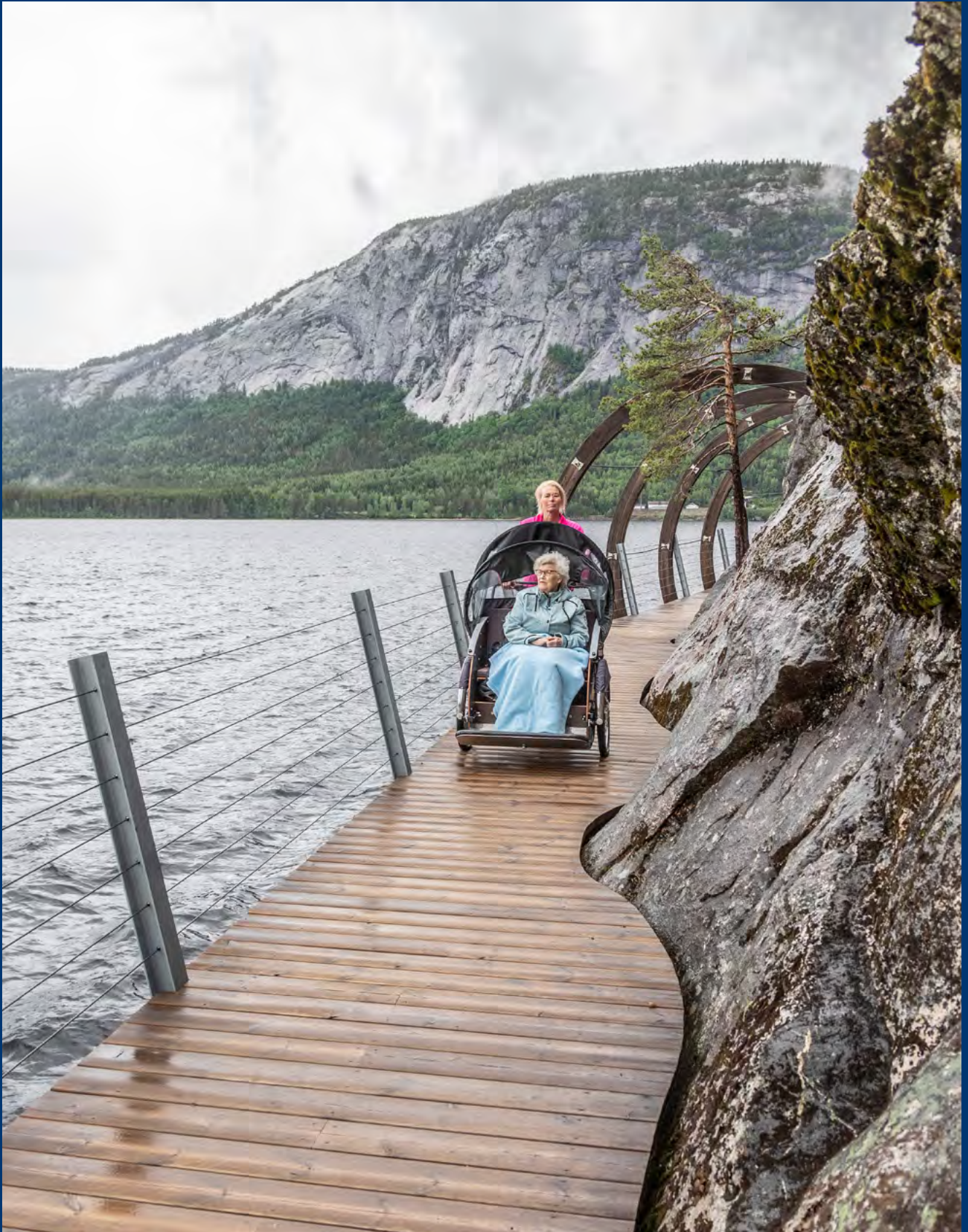
prefer not to climb stairs.

From the start of the renovation project, there was a great emphasis on achieving universal design.

“Møre og Romsdal County Council has contributed financially to the facility and we are very pleased that Trollstigen now complies with guidelines for universal design.”

Kongshaug believes that the interventions have had great significance for tourism, not just for Trollstigen.

“This has made Trollstigen accessible to everyone, which in turn means a lot for tourism to the county in general. Everyone wants to visit Trollstigen, and we see a spillover effect to many other tourist attractions in our beautiful county.”



Part 2:

Active in the neighbourhood



HAPPY HIKERS:
Vegard Alfsen and Per
Kristian Fodstad have
hiked a lot together at
home and abroad. In
Sarpsborg they both live
close to the boardwalk.
(Photo: Fredrik Naumann/
Felix Features)

The floating boardwalk

They have been friends for over 50 years and hiked together both at home and abroad. Vegard's eyesight is now impaired, but he can still safely go for a walk in his local area.

40 percent vision in his right eye, ability to see only light and shadow with his left eye, and one ankle prosthesis. This is the reality for 83-year-old Vegard Alfsen from Sarpsborg.

"My eyesight has been poor for many years, but I've gotten used to it," says the 83-year-old.

We meet him at the start of the beachside boardwalk in his hometown together with Per Kristian Fodstad. The boardwalk starts in Glengshølen, and is a wide wooden deck that winds along the shape of the mountain, hovering over a tributary of the river Glomma.

PLACE WITH HISTORY

They are joined by another 83-year-old, Aage Rishøi. He is the chairman of the board and Per Kristian is the secretary of the volunteer group *Hikes and Lighted Tracks in Sarpsborg* (TSL), which has constructed the boardwalk in collaboration with Sarpsborg Municipality.

The three men look across the landscape and reminisce:

"Previously, this was simply a filling area with industrial masses from various places. It was more like a rubbish dump," recalls Aage Rishøi.

"When the children were young, they had to pass through this area on their way to school. It was a mud hole, and they always came home dirty," adds Per Kristian Fodstad.

Even further back, when the three men were boys, this was the quay for the steamship *Krabben*. "The ship brought people and livestock from the villages, and on Saturdays it docked here. Farmers, horses and cows walked from here and up to the town square," says the trio, who grew up at a time when timber used to fill the fjord.

"The biorefinery Borregaard is right nearby, and timber was drifted right up until 1986. The timber was assembled in large rafts throughout the winter, and was anchored with cables attached to the rock."

SWEDISH INSPIRATION

The mounts can still be seen in the rocks along the well-used boardwalk located a short, sufficiently flat distance from the car park. That it ends with a "floating" part was not the original plan. The plan was to fill in with mass and build a walking path at the top.

"Nothing came of it, because the mass collapsed," they explain.

TIME FOR A BREAK: The boardwalk has a number of benches and tables with plenty of space for wheelchairs. (Photo: Fredrik Naumann/Felix Features)

TOILET IN PLACE: The volunteer team organised the construction of an accessible toilet. Sarpsborg Municipality is responsible for the maintenance. (Photo: Fredrik Naumann/Felix Features)



However, a municipal employee had noticed that the Swedes were good at anchoring such paths in the mountains. The municipality thus ended up with this solution, initially around 400 metres which were ready in 2016, then just under 500 metres more in 2019. He just managed to see it finished before he died of cancer.

PLACES TO REST

The boardwalk, a result of a joint venture between TLS and Sarpsborg Municipality, is universally designed, has a number of benches and ends up in an area with four sheltered huts, tables, barbeques and an accessible toilet. The boardwalk is connected to a network of trails covering around 40 kilometres. TLS organises two volunteer days a week, owns two cars and a lot of equipment to keep the trails and areas in order. They are skilled at writing applications and raising money via foundations and other channels, such as sponsorships.

“We are like a small business and everyone works for free.”

Vegard Alfsen praises the group:

“What they have done for accessibility is absolutely unique!”

Both he and Per Kristian have been wander-



ers for half a lifetime, having hiked together on holidays in Scotland and Cornwall – and all over Sarpsborg.

A WALK EVERY DAY

Vegard Alfsen and his wife Lisbeth go for walks several times a week.

“We get out almost every day. If I’m walking in the forest, I have to be accompanied. I don’t dare to walk alone, because it’s easy to fall and break arms or legs. Lisbeth helps me. She says: ‘There’s a root’, and ‘There’s a rock’ and ‘Be careful!’. Three days a week she works as a volunteer at the local Red Cross shop, but I can’t sit at home with a blanket over my knees. Then you might as well be dead! I can safely get



COLLABORATION: The boardwalk has been constructed in collaboration between the volunteer group *Hikes and Lighted Tracks in Sarpsborg* (TSL) and Sarpsborg Municipality. Per Kristian Fodstad (right) is secretary and very active in TSL. He enjoys an autumn walk with hiking buddy Vegard Alfsen. (Photo: Fredrik Naumann/Felix Features)

to the boardwalk on my own, it's only a short trip from home," explains Alfsen.

For over 50 years, they have lived in a terraced house nearby.

SAFE WALK

Vegard feels safer when he can go for a walk in areas where there are other people. There are plenty of people along the boardwalk, even on a Thursday morning. Vegard greets them and waves his hand to the right and left.

"I like to walk fast, I don't stroll, although I walk at a slightly slower speed because of my ankle. Before, I used to run the lighted track several times a week. My running days are over, now I'm glad I can go for a walk."



"My running days are over, now I'm glad I can go for a walk."

VEGARD ALFSEN (83)



DOWN TO THE WATER: The trail to the kayak facility has asphalt and a fence. The facilities have been constructed by The Norwegian Trekking Association (DNT), who is also responsible for maintenance. (Photo: Fredrik Naumann/Felix Features)

Making outdoor experiences accessible

How to create a recreational area that works for everyone without making major inroads into nature? That was the challenge Ås Municipality decided to solve.

Grethe Johnsen, project manager in Ås Municipality, puts the leash on her dog Troika, then leads the way inland to Breivoll at the far end of the Bunne fjord, a short drive south of Oslo. A vast area of grasslands, old trees, beach and forest, it remains a popular recreational spot for many who would like to keep it exactly as it was.

“The biggest sceptics of nature interventions can be people like me. I am an old orienteering runner and hardly ever wanted a trail at all,” says Johnsen.

DEMENTED MOTHER

But that was earlier. Through her work in the municipality and caring for her mother, she knows that nature cannot remain untouched.

“My mother was a sporty person. Before her dementia, she lived by herself and walked ten kilometres three times a week. She eventually moved to a dementia centre, and for a few years I tried to get her out for walks. It opened my eyes to the need for better access and facilitation. Here, for example, she probably wouldn’t dare trying to walk,” says Grete, pointing to a steep path.

“This part is on the list of places we would like to improve. We take it step by step, and the more work we do, the more new ideas and needs emerge.”

EFFECTIVE MEASURES

Much work has already been done, without major cuts to either nature or budget.



GENTLE SLOPE: The right gradient and a cover with 0.7 gravel provide an accessible trail. (Photo: Fredrik Naumann/Felix Features)



“The biggest sceptics of nature interventions can be people like me.”

GRETHE JOHNSEN, PROJECT MANAGER IN
ÅS MUNICIPALITY

Breivoll is a protected area, and Ås Municipality has owned the area since the 1960s. A few years ago, the municipality entered into a lease agreement with the Norwegian Trekking Association (DNT) for the northernmost part of the area.

“The main purpose of protected areas is that they should be accessible to the general public, which of course means everyone – regardless of functional ability,” emphasises Johnsen.

The local council has sealed roads, made the trails wider and given them a better gradient and surface. Bathing benches have been installed, accessible parking is clearly marked and spread out over various areas. There are plenty of signs, sheltered huts with space for wheelchairs and accessible toilets.

Outside the main house of the DNT Breivoll farm, Anders Nupen Hansen manoeuvres his wheelchair. He is visiting Breivoll to explore the project *Accessible tours*.

“What an incredible place! I’m passionate about outdoor experiences. It means everything to have access to areas like these,” says Nupen Hansen.

He heads the Norwegian Spinal Cord Injuries Association, and is a board member of the Norwegian Association of Disabled.

“We have looked at the path, and it is very accessible. This area holds so much more that makes it a joy to visit; grasslands, a beach and sports field,” boasts Nupen Hansen.

SAFE SWIMMING: The wheelchair accessible swimming ramp was installed in the summer of 2020. It replaced a defunct ramp from the 1960s. (Photo: Fredrik Naumann/Felix Features)





EXPLORING THE AREA:

“It means everything to have access to areas like these,” says Anders Nupen Hansen. (Photo: Fredrik Naumann/Felix Features)



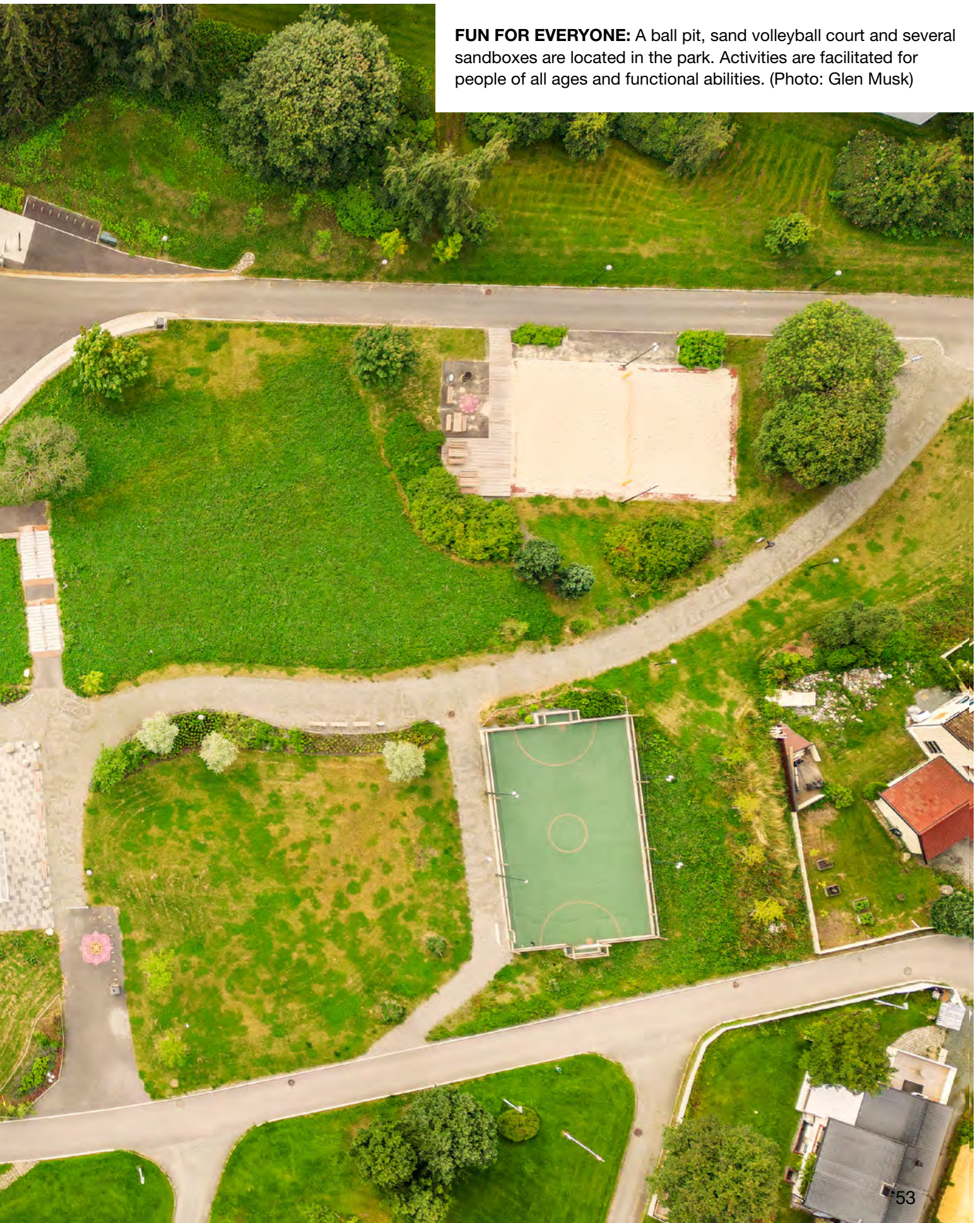
ROOM FOR 20: The sheltered hut was completed in the spring of 2022. One part can easily be tilted up, giving access for a wheelchair. (Photo: Fredrik Naumann/Felix Features)



One teenager's idea turned into a multipurpose park for everyone

Dalen Activity Park was supposed to be a youth park. But the young people wanted to include everyone. The result is a park that is out of the ordinary, with something for everyone.

FUN FOR EVERYONE: A ball pit, sand volleyball court and several sandboxes are located in the park. Activities are facilitated for people of all ages and functional abilities. (Photo: Glen Musk)





CONNECTION: It may look like a modest little path, but it is an important part of the transformation of the outdoor area. The gravel path connects the park with the rest of northeastern Saupstad. (Photo: Glen Musk)

We walk along the road from the shopping centre in Saupstad, in the middle of a densely populated residential area that has undergone an extensive area regeneration since 2013. Following a footpath and then a curve in the road we come to a large, lush flower bed and a slope lit by street lights, like pearls on a string. We are in Dalen Activity Park, one of the most evident results of the area regeneration initiative.

The area used to be a dark, messy cul-de-sac. And with the only structure on it being an old utility building belonging to a housing association, the area was perceived as unsafe and unpleasant.

Today, it is a diverse park to which the local population feels a strong ownership. Young people in the community, including local youth

councils, have been involved in planning and shaping the park from the very beginning.

INVITING OUTDOOR SPACE

Sigrid Gilleberg works as a landscape architect in Trondheim municipality, and has worked with the area regeneration initiative in Saupstad-Kolstad.

“We have put a lot of effort into making the outdoor spaces inclusive and an inviting meeting place for residents. This provides social sustainability,” she says.

What was initially planned as a youth park, eventually became a park for all. “Young people in the community wanted to include everyone. They wanted as many people as possible to enjoy the park,” she says. Gilleberg tells the story of a creative teacher who



A PLACE TO MEET: In the middle of the park is a long table with benches under a pergola with a translucent roof. “This is a popular meeting place for groups of kindergarten children or pupils who come here on excursions,” says project manager Sigrid Gulleberg. (Photo: Glen Musk)

integrated the area regeneration initiative into the curriculum of the elective subject Democracy in Practice. One of the students came up with the idea of working to get a new park in the suburb. The location was almost self-evident: it had to be the small, curvy valley with the cul-de-sac and old utility building.

PLENTY OF ELEMENTS AND VARIETY

After a lot of work and a political tug-of-war, funds were allocated from both municipal and national budgets. The work to develop the park could begin. Young people and the local youth council were heavily involved.

The result is a park with plenty of elements and variety. One of the first things you see is an area

with tall glulam arches that create a good sense of space. Asphalt and gravel have been replaced with wooden decking for different events and performances. The simple structures form an outdoor stage with power outlets for sound and lighting systems. There is no high edge around the stage; everything is stepless and at ground level.

PLAYGROUND FOR EVERYONE

Extending from the stage area is a skate park that slides into a parkour course with metal fences in various sizes and shapes.

“The various zones are used for different activities depending on who uses them. The facility is very flexible,” says Gilleberg.

OUTDOOR STAGE:

The glulam arches in the middle of the park's lower level form a stage and have power outlets. The deck is stepless and built so that anyone can use it for performances, concerts and get-togethers. (Photo: Glen Musk)



At the end of the park is a play area for toddlers and a steep shortcut that connects the park to the walkways in the area.

People can walk here even if it is steep, and interventions have been made for the shortcut to be usable for more people. It is paved with gravel, and handrails and benches have been set up at the top and bottom for those who need to sit down.

“There are many places to rest, sit and relax in all parts of the park,” says the landscape architect.

VARIED CONTENT

She explains that Saupstad-Kolstad has always had spacious outdoor areas, lots of green lawns and small, lush woodlands.

“However, there has been very little content in the green areas. There have been few places to meet and it was not really set up for play and activity,” she says.

One of the aims for the park has been to facilitate varied activities for all population groups in the area. It needs to work for everyone, regardless of background, age and functional ability.



SAFE STAIRCASE: Sigrid Gilleberg, landscape architect and project manager in Trondheim municipality, climbs the stairs to the park's top level. The staircase is wide and easy to climb. It has a central handrail in two heights and visible orientation elements.

There are benches with backrests along the way, and at the top there are wooden benches with armrests on both sides. (Photo: Fredrik Naumann/Felix Features)



Art in the park

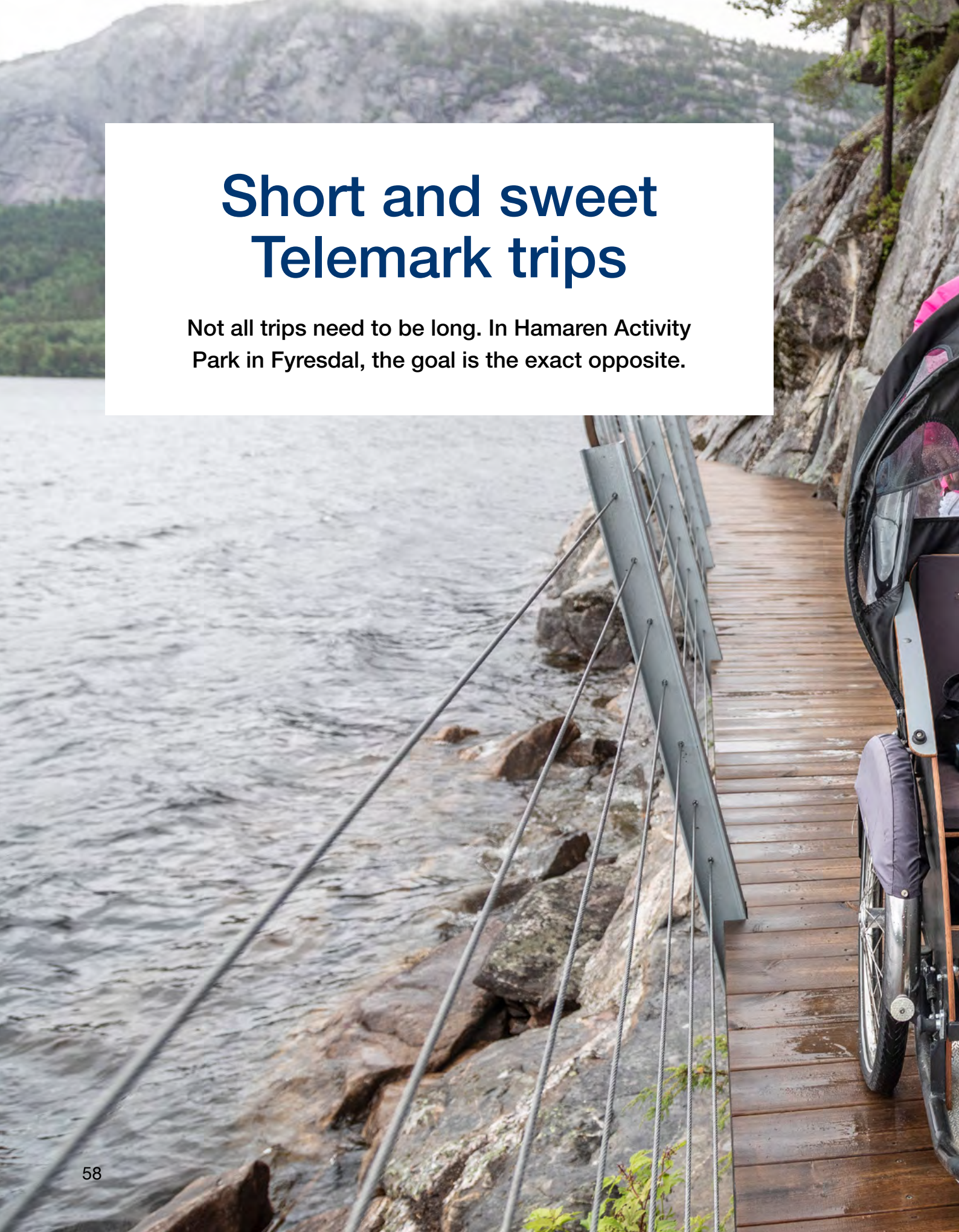
Art creates experiences for everyone. Dalen Activity Park is decorated with four mandalas painted on the asphalt. They were drawn by one of the young people who took part in the co-creation process. Erik Pirolt's sculpture "Neanderthal lovers" have their eyes fixed on the stars and sit by a ring of stones where there is room for an imaginary campfire. The sculpture is connected to the astronaut monkey at the entrance to the park. Both were created as part of the Art in Public Space programme for Saupstad in Trondheim.

(Photo: Glen Musk and Fredrik Naumann/
Felix Features)



Short and sweet Telemark trips

Not all trips need to be long. In Hamaren Activity Park in Fyresdal, the goal is the exact opposite.





ACCESSIBLE: Hamaren Activity Park in Fyresdal has become a success. “Here it is a short way to most things, and everyone can use the park,” says project manager and forest manager Aslak Momrak-Haugan. (Photo: Fredrik Naumann / Felix Features)



“**OUR FOCUS** has been to facilitate short-distance outdoor experiences,” says Aslak Momrak-Haugan, forest manager in Fyresdal municipality and one of the project managers for the park.

“We want as many people as possible to have the opportunity to get out into nature, not just the most active people,” he says.

Fyresdal is surrounded by wild and beautiful nature, but the great hiking opportunities are not suitable for everyone. The municipality’s ambition was therefore to create an accessible activity park that is suitable for as many people as possible in every age group, regardless of functional ability.

The park is located in the middle of Fyresdal, close to residential areas and natural hubs such as schools, kindergartens and nursing care centers.

“People don’t have to use a car to get here. It is a short walk away. And if it starts to rain, you can turn around and go home again,” says the project manager.

One of the main aims was to facilitate the park for as many user groups as possible. “The area was used in the past as well. But the

terrain is so hilly that it was difficult for many to walk here before we made the necessary interventions,” says Aslak Momrak-Haugan.

The headland itself, which plunges into the lake Fyresvatn, was completely inaccessible to most people.

The solution was a universally designed path of a total of 2.4 kilometers. The path runs along the water and over an airy footbridge, which is built on top of the steep mountain. Parts of the new footbridge are designed as an old-fashioned timber gutter, inspired by the traditional timber floating that has been an important industry in Fyresdal municipality.

Along the walkway, benches and seating areas have been set up with fire pits and barbecue facilities, and further into the forest, a larger outdoor kitchen has been installed, equipped with gas and hobs.

FUN FOR ALL AGES

Along the path two ladies come whizzing by on a nifty vehicle. One sits in the back and pedals, the other sits in the front in a wide, comfortable seat.

“This is my first park trip of the year, and it is



LOVING THE OUTDOORS: Kids and employees in Fyresdal kindergarten won't be stopped by a little rain. "We often use the activity park. The trail is suitable also for the youngest ones who have just learned to walk," says kindergarten manager Kathrin Theres Liltved. (Photo: Fredrik Naumann / Felix Features)

so nice to get out," says Turid Mandt (86) with a big smile in the front seat. The weather is capricious, and she is covered up with a blanket over her legs. The canopy keeps her snug and dry. Ingunn Lauvrak is in charge of the pedalling. She works at the local nursing care centre as well as at the volunteer centre. Since the park was ready in 2017, she has walked, run and cycled countless laps here, both at work and in her spare time.

"I have become very fond of this park," she says.

"It can be used by everyone, from toddlers who can barely walk, to the oldest approaching

100 years old. You can get around easily, whether you are using a pram, a walker, wheelchair or this style of taxi bike that we are using today." The bikes are ideal for older people who need a little help getting outside. Turid Mandt lives in her own apartment connected to the nursing care centre, and usually relies on a walker. Although she can easily go for short walks on her own, she can get further out into nature on a taxi bike. The two ladies have already agreed on a new trip.

"Next time, we will pick berries," says Turid Mandt firmly. She misses being able to go for a spontaneous walk in the forest.



NICE SHAPES: The footbridge is "shaped" along the mountain lines. (Photo: Fredrik Naumann / Felix Features)

HISTORICAL LINES: The start of the new footbridge is designed as a timber gutter, inspired by the traditional timber floating, an important industry in Fyresdal. (Photo: Fredrik Naumann / Felix Features)



"I have always loved picking berries, ever since I was a little girl. I can see that the lingonberry shrubs are in full bloom. It's looking to be a good year for berries," she predicts.

POPULAR PARK

Fyresdal municipality is located in upper Telemark and has only around 1250 residents. Nevertheless, the number of visitors to the activity park is sky high: The visitor counter at the timber gutter, the start of the footbridge, shows that almost 12,000 people make the route around Hamaren every year.

"On sunny days, the place is crowded,"

says Aslak Momrak-Haugan and lists examples of visitors:

"Schools, kindergartens, the nursing care centre, young people who like to hang out by the lake, employees at the local business hub who go for walks during their lunch break, retirees bringing a thermos of coffee, people who come for a work-out, families spanning several generations who go on outings together on the weekends." He continues:

"The park makes it possible for everyone to get around on the path. Fitter people can choose the more demanding route further into the forest, and maybe hike to the top of the



Hamaren mountain, where there are shelters and beautiful views. Or they can test the bike trail, which has eleven obstacles.”

The project manager believes an important reason for the success is that people in Fyresdal feel a strong sense of ownership of the park. When the municipality started the planning process, residents were invited to come up with ideas. Various user groups were given the responsibility for designing specific interventions such as bicycle paths, information posters and shelters.

“People really feel that this is their park,” says Aslak Momrak-Haugan.

Hamaren Activity Park has received attention from politicians in other municipalities, who make the trip to Fyresdal to get inspiration for their own projects. In 2017, the park received the Innovation Award for Universal Design from DOGA, Design and Architecture Norway.

NEW VANTAGE POINT

In the next few years, the plan is to expand Hamaren Activity Park with another spectacular intervention: A new walkway on wooden poles, 15 metres above the terrain. The walkway will meander in a zigzag formation up the mountain-side to the top of Hamaren. A new vantage point will be built there, a terrace with 45 metres in diameter, towering over the pine trees and with a panoramic view of Fyresvatn lake. This path will also be universally designed.

“It will be fully possible to get all the way to the top in a wheelchair,” says Aslak Momrak-Haugan.

Stage two of the park will be realised no earlier than 2022.

FACTS HAMAREN ACTIVITY PARK

- Nature park in Fyresdal, Telemark
- Universally designed path
- Suitable for walking, cycling, prams, wheelchairs
- 2.4 km round trip
- Outdoor kitchen, barbecue facilities, shelters
- Bicycle trail with obstacles
- Bathing places
- Completed in 2017
- Budget NOK 3.4 million





Getting closer to the past

The path along the rock carvings was just one of several interventions to make history more accessible.



COOPERATION: Advisory boards for disabled people at the county and municipal level were involved during the planning of the Solberg Field. “This kind of input is very useful for the planning process,” says archaeologist Linda Nordeide. (Photo: Fredrik Naumann / Felix Features)

BOATS, HUMANS, WAGONS AND SPEARS: In the Bronze Age, people carved their history into the rocks in Sarpsborg Municipality. The Solberg Field is one of Østfold’s over 600 petroglyph fields from the Bronze Age. Nowhere else in Norway has this many rock carvings of this kind. In 2010, interventions were made so that more people could explore this historic treasure. Where previously it was muddy and impassable, an elongated platform was built that slides into the landscape. Instead of a fence, ramparts were laid just off the road.

LESS IS MORE

“We facilitated the area to make it accessible to as many people as possible. It is also important that people have something to look at when they arrive,” says Linda Nordeide, conservator and archaeologist in Viken County Council. She decided to make changes to the information boards.

“I prefer to write as little as possible. Previously, the signs had a lot of text. They now have around 160 words. I still think it is too much, and that some of the text is not fully understandable. A short text on a topic may be enough. There is a limit to how much people can absorb. Most visitors prefer to use their senses and explore the place,” says archaeologist Nordeide.

SPECIAL FONT

The font itself is chosen with care.

“It is not only the size of the font that counts, but also the type of font. We have used a font that is specially made for people who have difficulty reading. It should be very clear and easy to understand.”

The information boards are attached to the top of a stand at a custom-made height. The boards themselves, which are made of plastic, are covered with a film to avoid shine that can



THE MAGIC OF DARKNESS:

The rock carvings in the Solberg Field at night. The lighting project is unique in Norway. (Photo: Bjørn Finstad / Østfold County Council)

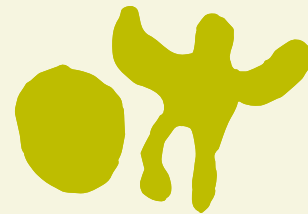
make reading difficult. In the first section of the Solberg Field, the rock carvings are painted red. Touching up rock carvings is generally avoided, but a dispensation has been granted at the Solberg Field.

“No one would see anything – regardless of their eyesight – if we had not been allowed to paint. These petroglyphs have such shallow cuts that if the paint is removed, they will be impossible to see.”

LIGHTS UP AT NIGHT

Viken County Council has been working with the Directorate for Cultural Heritage to find other methods for showing the petroglyphs. A few metres further away is another site. These carvings have not been painted, and are barely visible in the strong sun. But in the dark, they change completely: A lighting designer has developed a method that creates a special light and shadow effect.

“It provides a different experience. The light creates some of the magic, and can lead the mind to the use of torches in the Bronze Age,” says the archaeologist.



THE SOLBERG FIELD

The Solberg Field is located just east of the highway E6 in Skjeberg close to Sarpsborg. The field is one of many ancient monuments along “Oldtidsruta”, highway 110. Thousands of people visit this field every year. The field closest to the road has around 60 different figures: ships, carry wagons, humans, sun pictures and cup marks.





The serpent that could swallow all

In Norse mythology, the Midgard Serpent was a terrible sea creature, caught by the god Thor. It meant the end of both of them. Today, the serpent is wriggling again, in the form of a footbridge over the Frøyland Lake.

NORSE MYTHS: The Midgard Serpent passes Lalandsholmen, where the myth says that the Viking King Olav Trygvason was born. Anne Marie Auestad, Deputy of the Norwegian Association of Disabled (NHF) in Nord-Jæren and NHF Southwest is one of many who have fallen in love with the bridge. She has come with Anne Reidun Garpestad, who works with universal design in the Municipality of Time. (Photos: Fredrik Naumann/Felix Features)



”THE MIDGARD SERPENT is an example of combining ambitious architecture and sense of aesthetics with universal design,” says Anne Reidun Garpestad, who was the project manager when Time was a pilot municipality for universal design from 2005 to 2013. She still serves as a universal design consultant.

Bryne Residents’ Association undertook the initiative for the Midgard Serpent, which connects important hiking trails in Time and Klepp municipalities in Jæren. Surrounding Frøyland Lake is a 16 kilometre long hiking trail. The bridge has made the hiking area more accessible to those who prefer shorter walks. In addition, the spectacular design of the bridge, designed by Asplan Viak in Stavanger, has become a destination in itself.

AESTHETICS MATTER

”Aesthetics mean a lot to us,” says Olav Hetland, leader of the Bryne Residents’ Association in Time. The association worked hard for 10 years to realise the project, which was launched by a public festival in 2016.

Attempts to plan a bridge stalled in the 1980s. Back then the idea was only to provide a functional access from A to B. When the Bryne Residents’ Association put great architectural

visions on the table, they managed to stir up the interest that was lacking in the previous round.

Each Norwegian krone collected by the Bryne Residents’ Association from private funders was matched by Jæren Savings Bank, which was established in 2015 when Time Savings Bank and Klepp Savings Bank merged. Financial support became an important symbolic act, as the bridge physically connects the geographic range of the new bank.

”We received one million Norwegian kroner just by selling name tags to be put on the bridge,” says Hetland. In addition the project received funding from Norsk Tipping, a government-owned limited company that regulates gambling and assigns the revenues to good causes.

GOOD TEAMWORK

An organic 230 metre long shape, covered in 33,000 metres narrow, lime pine timber planks, winds its way over the water today – almost like a twig. The Midgard Serpent is more than a convenient short cut; it has become a landmark and an attraction in itself.

Close cooperation between the Bryne Residents’ Association, the architects and the municipalities, ensured that both aesthetics and universal design were safeguarded.



BETTER COMBINED: «We managed to make universal design and aesthetics work together, and create something even better than if we had just paid attention to one or the other,» says Anne Reidun Garpestad from Municipality of Time.

”Initially, this seemed like a crazy idea. Through dialogue we managed to make universal design and aesthetics work together, and create something even better than if we had just paid attention to one or the other,» says Garpestad, adding:

”The Midgard Serpent really refreshes the meaning of universal design. It’s not a matter of dull facilitation and adaptation. It’s about creating exciting design for everyone.”

INCLUSIVE

”Here I can go for a trip with my partner, who is also a wheelchair user. In fact, we can roll side by side over the bridge. That means a lot,» says Anne Marie Auestad, Deputy of the Norwegian Association of Disabled (NHF) in Nord-Jæren and NHF Southwest.

Access roads as well as a picnic spot have been upgraded to universal standard. The Midgard Serpent itself has stepless access, non-slip cover, a gradient in accordance with regulations, and is two metres wide. Discreet green lighting along the surface lights up the bridge, providing both security in the dark and acting as orientation lines.

Auestad rolls unobstructed from the parking lot, along the upgraded trail and onto the bridge. She appreciates this:

”I can come here for a trip with friends and family without special planning, without anything being ‘facilitated’ only for me. It makes me feel more included.”



The caravan park with space for everybody

At Solvik Caravan Park it is just as common for guests to bring their guide dog to the beach cafe as it is to remove a prosthetic leg before stepping into the water.

“WAKING UP TO THE SEA BREEZE and birdsong ... it is absolutely magical. It means so much to be able to holiday in a place where both the surroundings and the voices are familiar. Where it is easy to ask for help. There is a limit to where you can go on holiday and feel free as a visually-impaired person. Here at Solvik,

the whole community is tuned in to giving us a good holiday experience,” says Marianne Tollefsen from Oslo.

The 55-year-old was born blind, and her husband is also visually-impaired. Together with their two children, who are now adults, they have spent many long summers at Solvik



LIKE THE BACK OF HER HAND: “I don’t like to feel more disabled than I have to. It means so much to be able to holiday in a place that you know like the back of your hand, where you can do ordinary holiday things,” says Marianne Tollefsen from Oslo. (Photo: Fredrik Naumann / Felix Features)



PUBLIC HEALTH: “The corona pandemic has highlighted the need from a public health perspective to facilitate good recreational activities,” says Jan Tore Lindskog, Senior Advisor for Universal Design in the City of Oslo. (Photo: Fredrik Naumann / Felix Features)

Caravan Park and Beach for disabled people.

“It has been incredibly nice to spend our vacation in a place where we feel familiar and can do ordinary holiday things: fish for crabs, buy ice cream in the cafe and swim on a beach that is not crowded. For the visually-impaired, it can be difficult to get to know people. Many sighted people become insecure when meeting blind people. Here at Solvik, we are many who know each other, and it is easy to pick up familiar voices,” says Tollefsen.

OPEN TO EVERYONE

Solvik Caravan Park is located in scenic surroundings on the island Malmøya, a stone’s throw from Oslo city center. The caravan site has been in operation since the 1960s, and is run by Solviks Venner, an association for

disabled people. The caravan park has 62 sites where disabled people can apply to set up their caravan, and the beach is open to everyone who wants to visit on a day trip. The only requirement for getting a site is that you live in Oslo and have a disability that means that you would have problems camping at a regular caravan park.

“I don’t like to feel more disabled than I have to. Here at Solvik it is easy to walk to the beach on my own. The whole facility has been upgraded in recent years, and it is easy to get around whether you are blind or in a wheelchair,” says Tollefsen.

In 2010, the municipality built a universally designed swimming jetty. It consists of three parts: a fixed part on land, a floating jetty of concrete, and a gangway with a swim platform. The whole area is universally designed without steps

and steep inclines. The railing has handrails at two heights, and there are orientation lines to the shower and jetty. All information boards are in Braille. Next to the swim stairs is a shelf where you can leave your prosthetic limb before going into the water.

FROM OUTSIDE LOO TO ARCHITECTURE PRIZE

Not least, the residents of the caravan park have appreciated the upgrade of toilets and showers. The old toilet block was cramped, draughty and poorly adapted to disabled people. Even non-disabled visitors struggled to use the outdated facilities.

“They were worn-down loos, to put it bluntly.” Jan Tore Lindskog, Senior Advisor for Universal Design in the City of Oslo, is proud of what they have achieved with tight budgets and strict



“There is a limit to where you can go on holiday and feel free as a visually-impaired person.

Here at Solvik, the whole community is tuned in to giving us a good holiday experience.”

MARIANNE TOLLEFSEN



UPGRADE: The old toilet block was cramped, draughty and poorly adapted to disabled people. Also non-disabled people struggled to use the outdated facilities. The new building has received an architecture award for good universal design. (Photo: Fredrik Naumann / Felix Features)



SAFE SWIM: The universally designed swimming jetty consists of three parts: a fixed part on land, a floating jetty of concrete, and a gangway with a swim platform. The railing has handrails at two heights, and there are orientation lines to the shower and jetty. (Photo: Fredrik Naumann / Felix Features)

requirements for adaptation to the vulnerable nature on the island. In 2017, the sanitary facility was awarded the Innovation Prize for Universal Design by Design and Architecture Norway (DOGA). The building is made of wood, with a superstructure in between. This provides a good view to the sea and the protected trees, and makes the building less dominant in the landscape. The building is easily accessible via automatic sliding doors, and the terrain is carefully modified to avoid the need for ramps and thresholds.

EVENS OUT SOCIAL DIFFERENCES

“Solvik has been part of a project to make municipal beaches and islands more accessible,” says Lindskog, who heads the project.

Other beaches, such as Hvervenbukta and Ingierstrand, have been equipped with more accessible walkways and swim ramps. An upgrade of ferry berths, new swim ramps and walkways is now being planned on several of the islands, which will make it safer and easier to get on and off for the visually impaired, people in wheelchairs and older people. New kayak

piers at Hovedøya and Sørenga make it easier to enter and exit kayaks for people with reduced mobility.

Over the last three years, NOK 330 million has been allocated to the project, and the City of Oslo is in the process of concluding a range of interventions to improve accessibility to buildings and recreational areas.

“The corona pandemic has highlighted the need from a public health perspective to facilitate good recreational activities. Universal design is not just about facilitating for disabled people – it is essential for creating age-friendly societies,” Lindskog stresses.

Meanwhile, Marianne Tollefsen is looking forward to spending another summer recharging her batteries together with her husband and friends at Solvik Caravan Park. The only thing that prevents her from using the swimming facilities is the water temperature.

“I’m a little fussy, and prefer a water temperature of at least 20 degrees before I have a dip. I also wouldn’t mind a universal design that could protect against stinging jellyfish!”

New path on historical grounds

A lighthouse, a fortress built during World War II and a universally designed path have made Fjøløy a popular destination in the Stavanger region.



WALKING COMPANIONS: Steinar Haugvaldstad, Ola Njå and Henry Magnus Haugvaldstad keep up their fitness by walking around Fjøløy three times a week. They have no problem getting around on the universally designed path. Fjøløy lighthouse is in the background. (Photo: Fredrik Naumann / Felix Features)

FOR MORE THAN 70 YEARS Fjøløy was a military ground that was closed to the public. Now it has been opened up and made available to as many people as possible. The new path leads to the last remaining cannon site on the island, and is suitable for most people regardless of their fitness and functional ability.

“Three times a week we go for a walk here,” says Ola Njå (84).

He walks along the path at a good pace, together with fellow hikers Henry Magnus Haugvaldstad (89) and Steinar Haugvaldstad (77). On Mondays, Wednesdays and Fridays, the three good old friends meet to go for a walk on Fjøløy. They have a fixed route, from the car park to the picnic area and back.

“On the weekends there is no point coming here. The parking lot is usually packed,” says

Henry Magnus Haugvaldstad.

“This is a popular place, and has become a very nice spot to go for a walk,” says Ola Njå, with a steady grip around his cane. He was born and raised on Fjøløy, and spent many years tending to the family’s sheep, which graze on the island.

“I’m still pretty fit. My balance is not as good as it used to be, and a cane makes it easier to walk,” he says.

«FESTUNG NORWEGEN»

It was the Germans who established Fjøløy Fortress and a number of other fortresses along the Norwegian coast, during World War II. The Nazi regime feared an Allied invasion from the sea, and the coastal fortresses were important in securing the occupation. On Fjøløy, three battle-ready cannons guarded the sea route to Stavanger.

In 1945, the Norwegian Armed Forces took over, and after the war, Fjøløy was used as a coastal fortress and military training area until 2009. In 2011, Stavanger Municipality took over and regulated the 270-acre area as a recreational area for the public.

CHALLENGING PROJECT

Fjøløy is located towards Kvitsøyfjord, a few kilometres from the famous Utstein Monastery. Following the regional municipal mergers, the area now belongs to Stavanger Municipality, and is managed in collaboration between the municipality, Fjøløy’s Friends, Stavanger Trekking Association and Ryfylke Outdoor Recreation Board.

Hans Olav Sandvoll, General Manager of the Outdoor Recreation Board, says that the choice of route for the universally designed path was not easy.

“The terrain is hilly and demanding, and there were many considerations to take along



ACCESSIBLE: Hans Olav Sandvoll in Ryfylke Friluftsråd is happy that the historic areas on Fjøløy have become an outdoor gem that is now accessible to everyone. (Photo: Fredrik Naumann / Felix Features)

the way, including all the birds that nest here. The path runs close to the beach and boat traffic, and should therefore be as secluded as possible,” he says.

From earlier times, another road enters from the back of the hill. But it is too steep to meet the requirements for universal design. Hence, a completely new path had to be made around the headland.

“On such projects, there is always a question of how large-scale the intervention should be,” says Hans Olav Sandvoll and explains:

“Our goal has been to make nature accessible to as many people as possible, without changing more than necessary.”

MANY CONSIDERATIONS

Four or five different routes were checked out before landing on the current solution.

“It may not be 100 percent perfect, but the climb is manageable for wheelchair users. With an electric wheelchair, there is zero problem. If you use a manual wheelchair, you may need some arm strength. But along the entire route, we have built resting areas and flatter ledges where people can take a break, says Hans Olav Sandvoll.

Before the path rounds the headland, you pass through a newly constructed gorge in the rock.

“We chose to cut and carve an opening in the rock and build the path on the ground, rather than construct a path on piles over the mountain. This would have been too visible and dominant in the landscape, for example from the sea.”

The path is illuminated, but the lampposts have been kept so low that they are invisible to passing boats. The surface is finely granulated gravel mixed with slightly coarser gravel, but not so coarse that it gets stuck in wheels.

“The gravel is a firm and solid surface that works well for most people. A concrete surface

would have been optimal for wheelchair users, but would have taken away the feeling of being in nature.”

Hans Olav Sandvoll stresses that recreational areas such as Fjøløy need to be supervised and maintained after completion.

“A universally designed path can quickly become impassable. It doesn’t take more than a tree falling over the path, or a heavy downpour washing away some of the gravel,” he says, adding an important reminder:

“We advise visitors not to walk here alone, just as listed in the Norwegian Mountain Code (“Fjellvettreglene”). This applies to everyone, and especially to wheelchair users.”



HIKING TRAILS AND TOILETS: New hiking trails cross the landscape, and a new toilet facility is available when nature calls. One of the four toilets is an accessible toilet. (Photo: Fredrik Naumann / Felix Features)



WAR MEMORY:

The Germans established Fjøløy Fortress in 1942. The last remaining German cannon on the island is near the path. (Photo: Fredrik Naumann / Felix Features)

MEETING POINT

The new picnic area and toilet facility, designed by Ole Trodal Architects, is located next to the last cannon left on the island.

“The facility is designed so that it stands out from the fortress and the old defence buildings. This is a new building, which should be immediately apparent,” says Hans Olav Sandvoll.

The picnic area is fenced in to keep out the grazing sheep. Roofs cover tables and benches to protect from rain and snow. On this particular day, Ola Njå and his fellow hikers take a seat at one of the tables, just as they usually do.

“The weather is rough out here, I can testify to that,” says Ola Njå.

He is one of the original landowners on the island, and when the military decided to no longer use the area, his family wished to buy it back. He was nevertheless happy when the municipality decided to turn Fjøløy into a recreational area.

“We were initially worried that wealthy investors would buy Fjøløy for property development.

It is much better that the area is used for the benefit of the public,” he says.

At the picnic area, information boards have been put up about Fjøløy’s history. Ola Njå and his friends know it inside and out. Even though they were young boys during the war, they remember well how the Germans held the fort. They love sharing stories. One time they even got to try on the helmet and hold the rifle of one of the young soldiers. The soldiers used to give them candy. Another time, one of the biggest and wildest rams burst through the window of the German command barracks.

Ola Njå chuckles.

“We thought it was exciting. But even if we were young, we always knew one thing: The Germans were the enemy.”

The plan is to expand the universal design of a number of the military buildings at Fjøløy. Several of the buildings are used for school camps and other activities. Even if they have been facilitated for wheelchair users, a fair bit of work still remains.



TOP NOTCH: Cato Lie grins on his way down, having been able to enjoy the view of the Grorud Valley – by his own accord. (Photo: Fredrik Naumann/Felix Features)

Everyone to the top

The Stovner Tower in Oslo is proof that the ideal of a society where everyone can participate at the same level can inspire spectacular architecture that provides adventure and qualities for the whole population.

It all began with a big, hairy idea, enthusiasts with a plan – and a municipality that cares about universal design through and through.

”You must believe in the impossible,” says Truls Korsæth, project manager in the Agency for Urban Environment in the Municipality of Oslo.

The idea of The Stovner Tower came from the spectacular walkway that is built in the treetops of a national park in the German federal state of Bavaria.

”The idea there is to preserve nature while allowing people to move through it and get a completely different experience of the forest and trees,” says Korsæth.

Scepticism was quickly turned into enthusiasm as both politicians and planners began to take in what The Stovner Tower could mean for The Grorud Valley Integrated Urban Regeneration Project. This collaboration between the

Municipality of Oslo and the national government is an environmental and living condition intervention that will create lasting qualities for communities in a suburb characterised by urban challenges.

”The response was unanimously positive,” says Korsæth.

TO THE TOP ON WHEELS

Today, The Stovner Tower is a natural part of the network of walking trails around the Stovner shopping centre, making up the heart of the universally designed activity park, Jesperudjordet.

”It was important for us to create park facilities that are adapted to all user groups: young and old, able-bodied as well as the disabled,” says Korsæth.

The jewel of the crown is a 260 metre long walkway, spiralling up over the treetops, with a gradient that allows visitors who are dependent



WAY UP: Fourth graders from Stovner School rush towards the top with delighted squeals. (Photo: Fredrik Naumann / Felix Features)

on a wheelchair or walker, or bringing a child in a pram, to get to the top on their own accord. Along the way are resting areas and benches. Rails and lighting provide safety and security for all, day and night, forming natural orientation lines and clear contrasts. At the top awaits views in all four directions.

STEPLESS TOWER

"Everyone thinks of a tower as something to climb or access by lift. It was fun to create a tower where the walkway slinks up towards the sky in one single long movement, inspired by a bird in flight," says Korsæth.

"Most people will associate ramps with wheelchair users. This is also a ramp, but it

URBAN REGENERATION: The Stovner Tower is located between Stovner's characteristic suburban high-rises. 3 and There is a lot of traffic up and down the tower, which has become a popular outing destination. (Photo: Fredrik Naumann / Felix Features)



is a long and amazing ramp that can be used by everyone. I think this is a fantastic and impressive construction," says Cato Lie, Policy Advisor for Universal Design in The Norwegian Federation of Organisations of Disabled People (FFO).

Project Manager Korsæth believes the best thing about the tower is that it gives everyone the opportunity to see the tops of the trees, not just experience the scenery from the ground, and the view that extends far beyond the Oslo Fjord.

"When you get an idea like The Stovner Tower, which initially seems a little wild and crazy, you shouldn't let it go. You should have the guts to implement it. Most constructions can be universally designed, and the design



does not have to suffer,” says Korsæth.

”Symbolic projects like these are important. They get attention and demonstrate that universal design can be beautiful,” adds Cato Lie.

Korsæth agrees:

”We must make sure that universal design not only manifests itself in flat and unobtrusive projects. You can create so many exciting projects if you just wrack your brain a bit and include the users from the idea stage onwards. Automatically you will design a better building for everyone.”

”We must make sure that universal design not only manifests itself in flat and unobtrusive projects.”

TRULS KORSÆTH,
THE AGENCY FOR URBAN
ENVIRONMENT

This is how universal design is defined in Norway



Norway bases the understanding of universal design on the 1997 definition and seven principles by Center for Universal Design, North Carolina State University (US).

The principles were developed by a group of architects, product designers, engineers and environmental design researchers, led by the late Ron Mace.

Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

1

Equitable Use

The design is useful and marketable to people with diverse abilities.

Guidelines:

- 1a. Provide the same means of use for all users: identical whenever possible; equivalent when not.
 - 1b. Avoid segregating or stigmatizing any users.
 - 1c. Provisions for privacy, security, and safety should be equally available to all users.
 - 1d. Make the design appealing to all users.
-

2

Flexibility in Use

The design accommodates a wide range of individual preferences and abilities.

Guidelines:

- 2a. Provide choice in methods of use.
 - 2b. Accommodate right- or left-handed access and use.
 - 2c. Facilitate the user's accuracy and precision.
 - 2d. Provide adaptability to the user's pace.
-

3

Simple and Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Guidelines:

- 3a. Eliminate unnecessary complexity.
 - 3b. Be consistent with user expectations and intuition.
 - 3c. Accommodate a wide range of literacy and language skills.
 - 3d. Arrange information consistent with its importance.
 - 3e. Provide effective prompting and feedback during and after task completion.
-

4

Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Guidelines:

- 4a. Use different modes (pictorial, verbal, tactile) for redundant presentation of essential information.
 - 4b. Provide adequate contrast between essential information and its surroundings.
 - 4c. Maximize "legibility" of essential information.
 - 4d. Differentiate elements in ways that can be described (i.e., make it easy to give instructions or directions).
 - 4e. Provide compatibility with a variety of techniques or devices used by people with sensory limitations.
-

5

Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Guidelines:

- 5a. Arrange elements to minimize hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
 - 5b. Provide warnings of hazards and errors.
 - 5c. Provide fail safe features.
 - 5d. Discourage unconscious action in tasks that require vigilance.
-

6

Low Physical Effort

The design can be used efficiently and comfortably and with a minimum of fatigue.

Guidelines:

- 6a. Allow user to maintain a neutral body position.
 - 6b. Use reasonable operating forces.
 - 6c. Minimize repetitive actions.
 - 6d. Minimize sustained physical effort.
-

7

Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

Guidelines:

- 7a. Provide a clear line of sight to important elements for any seated or standing user.
- 7b. Make reach to all components comfortable for any seated or standing user.
- 7c. Accommodate variations in hand and grip size.
- 7d. Provide adequate space for the use of assistive devices or personal assistance.

Source:

[*Centre for Excellence in Universal Design*](#)

The UN Convention on the Rights of Persons with Disabilities (CRPD)

Norway also follows the Human Rights based approach to persons with disabilities, and the definition of universal design as stated in Article 2 of the convention: “The design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design”, not excluding “assistive devices for particular groups of persons with disabilities where this is needed.”

Equality and Anti-Discrimination Act

Universal design is embedded in several laws and regulations, such as the Planning and Building Act and Regulations on technical requirements for construction works (Tek17). The Equality and Anti-Discrimination Act, Chapter 3, section 17, defines universal design as:

«Universal design» means designing or accommodating the main solution with respect to the physical conditions, including information and communications technology (ICT), such that the general functions of the undertaking can be used by as many people as possible, regardless of disability.



KS IN ENGLISH

Read more about KS' work on universal design on our website: <https://www.ks.no/om-ks/ks-in-english/>

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