

A short Norwegian diving history.

It can be argued when the first dive in Norway took place. In fact when did Norway become a state? The first record of a dive by a Norwegian can be found in Egil's Saga. This is the saga of Egil Skallagrimson and his ancestors. His grandfather got in trouble with Harald Fairhair when he tried to conquer all the small kings in Norway around 860 – 870 AC.

Some accepted his rule, others not. One of these, Kveldulf, left for Iceland. His son was Grimur Kveldulfsson, better known as Grimur the Bald or Skallagrim. (Bald Grim) One of his sons was Egil Grimursson, better known as Egil Skallagrimsson. Egil was born in 910.

It is Egil's father who dives. Grimur was a skilled blacksmith. He built himself a smithy at Rauvarnes a fair distance from his farm at Borg, but had no anvil. The stones in the area was not suitable. One evening he rowed an eight-oar boat on his own to Midfjordsøyane. There he anchored and stepped overboard and dived. He brought a stone to the surface suitable as an anvil, and threw it into the boat. About 300 years later writer of the saga, most likely Snorre Sturlasson, states: Four men have a problem lifting it today.

This freedive is the only record we have until bell diving starts up. The king of Denmark-Norway issues salvage rights around 1550. They probably worked from the surface with long poles and tongs. Recorded bell dives start in Sweden with the salvage of the guns from "Vasa" and the record by Francesco Negri published in Italy in 1704. Here he describes a dive in Stockholm harbour in 1663. Negri's description of the bell: 5 palmi high (125 cm) or 4 feet 2 inches. Of proportional width. Lead slab suspended 2 palmi (50 cm) 1 foot 10 inches below the bell. The man in charge is von Trieleben, but his diving supervisor is Andreas Peckell. He invents improvements to the bell diving operation. A barrel with a hose attached for air replenishment. Comfortable leather clothes. Long poles with screws etc. Large "tongs" that can hold half-cartowers (24 pounder guns). Saddle like lead weight to sit on.

The first bell dive recorded in Norway is by a Danish nobleman on a trip to Norway and he observes a dive in Kilstrømmen north of Bergen in June 1673. "The diver is dressed in leather clothes from top to toe, stands in a lead bell and is lowered from the ship to the bottom, has a small rope by him, on which he pulls when he wants to come up, and *also when he wants to be moved*, on which another who stands out in the ship has hold of, pays attention to and understands. When he comes up again, then escapes from the bell his breath that he has kept by him, like a thick fog. He was once down half a quarter of (off) an hour and *was moved*

here and there. In this way he has salvaged 500 copper plates. The name of the diver was Jacob Vinschænk (James the Winepourer). Did he work for the man who possessed the Royal Privilege for diving in Denmark-Norway at the time? That was no other than Andreas Peckell who in 1671 received this for 15 years.

The time and the depth of the dives on “Vasa”, half an hour and 30 meters, and Kilstrømen 53 minutes and 30 meters, were questions we wanted to find an answer to with our bell. At 30 meters the level of water in the bell is around 2/3s up in the bell and the partial pressure of CO₂ reached 30 millibars after 10 minutes. So did they keep the air barrels a secret to the observers?

Are there other descriptions of bell dives in the United Kingdom of Denmark-Norway?

In Copenhagen 1710 (salvage guns from a blown up ship) In 1713 the king orders the building of a barge for the diving bell already in his possession In Strømstad and Marstrand 1719 (Salvage scuttled ships after war with Sweden). Not bell diving but a curious note appears about 1775 of a Nathaniel Mathiesen who informs that he has for 20 years worked at salvaging and raising sunken ships in Norway when he applies for a Royal privilege.

In 1814 Norway ends up in a Union with Sweden after the Napoleonic wars.

When do we start with hard hat diving in Norway?

Around 1845 - 1850 the navy acquires equipment from the UK and later in 1867 from France. In 1849 a Danish diving vessel salvage a cargo of copper from ”Johan August”. (The Danish salvage company Zwitter starts operations around 1835.). In 1851 British vessel works on the same wreck. In 1856 Annanias Dekke a shipbuilder in Bergen hires the navy’s ”diving apparatus” for a salvage job. It is said to be the only diving apparatus in Norway at the time. Sometime between 1857 and 1860 ”Ballasten” in Bergen buys diving equipment from England. Then in 1864 we have our first known diving fatality of a navy diver on a civilian job.. Then in 1866 Norsk Dykkerkompani starts constructing a quay in Oslo, and from now on diving develops all over the country.

How many divers?

At the present moment I don’t know of early records of the number of divers employed. The first record is from 1955. The numbers then are:

With salvage companies approx. 40 divers

With construction diving approx 50 divers

For the harbour authorities approx 30 divers

For shipyards approx. 20 divers

Diving for the navy (unknown)

The government harbour development department (unknown) They had in 1900 27 diving apparatuses

Total approx 200?? divers

Various diving operations.

Armoured diving Suits (ADS). We have some records before, during and after the second world war. We display a Hagenuk suit in our collection. This was used the last time in 1960, but we also have records of dives in the North Sea with the NEWT suit.

Inshore construction work. Started as said earlier around 1860 and will continue for years to come on bridges, dams, ferry quays, water pipes, sewer lines etc. etc.

German diving during the war. Mainly salvage work, sometimes subcontracted to Norwegian companies.

Allied military diving during the war. We have records of various diving operations against targets in Norway during the war. Most are by small submarines. The Germans found some Sleeping Beauty underwater kayaks hidden on the west coast. They had been used in a small operation. But the most spectacular operation using these crafts never materialized. During a large night time bombing attack on Bergen with over 200 planes they planned to drop six of these in parachutes with their operators and then attack ships along quays in Bergen and the floating dock just outside Bergen. Then we have the attack on “Tirpitz” with two Chariots when she was in the Trondheim fjord. They lost the chariots just before they entered the Fjord. Then the attack on Bergen using the one man Welheim submarine. Also a failure. The successful attacks on “Tirpitz”, now moved near Alta, was with X-Crafts. An X-craft was also used on the second and successful attack against the floating dock in Bergen This stopped any

plans of moving the damaged “Tirpitz” to Bergen for repairs in this floating dock. The dock was also used for repair of other German warships and submarines.

Navy diving after the war. They started training their own combat divers outside Oslo in 1953. This training is still in progress and combat divers have been and are used in different NATO operations. The navy stopped using hard hat divers around 1975, but continued training civilian hard hat divers until 1985.

Police operations. The police have a secret group of staff also trained in diving. The group’s task is to protect us in case of terrorist attacks and were last used at Utøya to arrest Anders Bering Breivik after his mass murder of young members of the Labour party.

Salvage diving. An ongoing business that, as told earlier, started around 1550, was very large for about a hundred years between 1870 and 1970. We have had over 30 salvage companies in Norway employing between 70 and 80 salvage vessels in the period between 1860 and 2011. Those in use today are combined vessels doing much more towage than salvage.

Offshore diving in the Norwegian sector. The first diving operation was in 1967 and has over the years included ADS diving, mini submarine diving, lock out submarine diving, air diving, bounce diving and saturation diving. If we try to summarize this activity, over the years 23 different diving companies operated with Scandinavians divers. Around 60 drilling rigs, construction barges, Diving Support Vessels (DSV) had or have Scandinavian divers on board. Approx. 400 Norwegian closed bell divers have been trained. And sadly we have had 17 fatalities in Norwegian waters (5 Norwegians), the last one in 1987.

Training of divers and the development of diving rules and regulations.

Ca. 1850 The divers are recruited from the ship carpenters in the navy. On the job training.

1869 A Navy Diving Manual.: ”*About the diving apparatus and diving. Published for use on board the warships*” was issued.

1915 New diving rules for the navy are published. The military divers are trained by the Craftsmen corps. Civilians employed by the navy’s salvage department or at the navy yard can apply for a place on the military course.

1932 A draft is made for Norwegian diving regulations. Nothing comes out of this first attempt.

1946 A new attempt is put forward. This requires training at a diving school which does not exist at this moment. And nobody knows when this school will start.

1948. The navy starts up with civilian courses in Trondheim.

1952 A diving committee is formed. One of the issues to be discussed is a diving school.

1953 A draft for diver training is issued based on the navy course.

1959 Diving regulations for hard hat diving are published. The divers need a diving certificate

1967 Diving regulations for commercial diving with "light" equipment are published. No formal training is required. (Have to be medically fit)

1973 First civilian closed bell diving course is held in Tromsø by Seaway Diving AS

1978 Preliminary regulations are published for diving in the North Sea. The diver must have a diving certificate.

1978 A report on the forming of a State Diving School is handed over to the Department of Education.

1979 Funding for a temporary school for closed bell diving is in the national budget for the following year. The navy still runs the only course for hard hat and light weight air diving.

1985 The State Diving School takes over the air courses.

1990 A private air diving school starts up in Oslo.

1990 Finally the State Diving School moves into permanent facilities outside Bergen 54 years after the first mention of such a civilian school.

Other diver categories using lightweight equipment

Navy divers. Have their own rules and regulations.

Rescue divers (Need a Norwegian class R certificate) Started in 1955

Scientific divers (Need a Norwegian class S certificate) Started in 1960

Diving on fish farms, for scallops and sea urchins. (Need a Part I diving certificate) Started in 1965

Police diving. Anti terror, hush, hush police. Exempt from diving regulations

Commercial underwater photographers (Need a Norwegian class S certificate as from 1999)

Sport diving instructors (Need a Norwegian class S certificate as from 1999)

Sport diving (Need a sport diver's certificate).

History of sports diving.

1951: The first diving club founded, Oslo Undervannsklubb. The club is the second of its kind in Europe.

1954: Jan-Thommes Thomassen starts the first commercial sport diver training school.

1957: The founding of Norges Amatørdykkerforbund, later Norges Dykkerforbund and after that Norges Dykkeforbund (Norwegian Sport Divers Federation).

Norwegian producers of diving equipment.

1862 Mr C C Steenstrup, of Christiania. (Oslo) ??

From the early 1950's. Masks and flippers by Ivar Klausen

Bokawawa-mask and snorkel

Kadamask

Viking dry suits (1953)

Helly Hansen woolly bears and related equipment (1970)

FCO hotwater suits (1985)

Wetsuits. Several producers from 1965.

Vingtor divers radio. (1955)

Woco divers radio (1970)

Paulsen Bounce diving equipment. SDC and DDC (1975) known as the "Rat trap"

Møllerodden saturation systems. (1974) 14 in all

Monitoring equipment, by some producers.

Breathing equipment (Ottestad and FUDT helmet). Never commercial

Research and Development

The Navy

Norwegian Underwater Institute (NUI) from 1976 later NUTEC and now Norwegian Underwater Intervention (NUI)

Universities

Dr. Sem-Jacobsen. Some work done offshore around 1975

Det norske Veritas

SINTEF

Thelma

Oil companies

Norwegian books about diving

1869 Marinens dykkerelement: Om dykkerapparater og deres bruk ombord på krigsskipene.

1915 Dykkereglement for marinen

1941 Av Bjergningsvesenets Historie, Bind I, fra oldtid til nutid

1943 Av Bjergningsvesenets Historie, Bind II krigsår og krisetid

1946 Av Bjergningsvesenets Historie, Bind IIIA Havarihistorie

1946 Av Bjergningsvesenets Historie, Bind III B Havarifortegnelser

1949 De setter livet inn, redning, berging, dykking

1953 Den Tause Verden

1953 På 500 favners dyp

1954 Dypvannsskipet, 4050 meter ned i havet

1957 Froskemennene. Sannheten om undervannssabotørene

1957 Undervannssvømming: en håndbok om dykking som hobby

1963 Levende Hav

1967 Amatørdykking

1973 Skattejakt langs norskekysten

1975 Skatter på havbunnen: på dykkerjakt i Norges historie

1975 Den norske undervannsboka

1985 Med kamera under vann

- 1986 Den store boken om dykking
- 1994 Fra Marinedykkingens Historie i Norge
- 1996 Historie og drama fra havets bunn
- 1999 Ofret for svart gull
- 2000 Bobler i Blodet, Dypvannsdykker Ragnar R. Knutsen
- 2000 For lut og salt vann
- 2000 Den store skammen
- 2001 Best på bunnen. NUI gjennom 25 år
- 2003 Pionerdykkerne i Nordsjøen
- 2004 På Dypt Vann, Pionerdykkerne i Nordsjøen
- 2007 Sportsdykking i 50 år
- 2008 Fra dypet: Nordsjødykkernes historie
- 2009 Bragd og Berging, om forlis og bergingsaksjoner
- 2009 Nordsjødykkerne
- 2011 Hjelmdykking. En karriere på godt og vondt

The Historical Diving Society, Norway

Founded in 2000 and affiliated with HDS

Ancient Bell Diving Seminar 2005

In 2010 we opened a permanent exhibition of diving tools and equipment at the diving school in Bergen. Some items are exhibited at other locations.

In 2011 we have 540 pieces of equipment, books, films, posters and pictures registered in a public database. The same database as most museums in Norway.