How can you contribute to this research?

Take the length, weight and a sample of scales from each trout you catch at sea or from sea trout catchments, and send them to NINA: NINA v / Rachel Paterson, PO Box 5685 Torgarden, 7485 Trondheim.

Scale sampling:

- Scale samples are taken from behind the dorsal fin and directly above the midline (see scale envelope for location)
- From dead fish, around 30 scales can be taken with a knife. From live fish, 5-8 scales are plucked out with tweezers distributed on each side of the fish
- Place the scales for each fish in a separate NINA scale envelope. Remember to fill in details about your fish and yourself
- IMPORTANT! Do not wrap the scales in plastic!
- If you find a PIT tag in your fish, place it in the envelope with the scales



Fill in the information about your fish as shown here. (Note: Vassdrag = catchment, Vassdrag = ca

Want to know more about your fish?

Write your mobile number on the scale envelope and you will receive an sms with information about your fish!

Contacts:

Rachel Paterson (project manager) 481 37 867 rachel.paterson@nina.no

Marius Berg 45434082, marius.berg@nina.no

Peder Naalsund 482 71 490, pednaa@gmail.com

More information about NINA's sea trout research can be found at: www.nina.no/english/seatrout



@NINAnature



@ninaforskning

Norsk versjon tilgjengelig på: www.nina.no/sjoorret



Lengde = length, Vekt = weight, Hann = male, Hunn = female, Kjønnsbestemt ved å åpne fisken / JA / NEI = gender determined from an opened fish / YES / NO)

More information about scale samples and analyses available at:
http://www.nina.no/lakseskjell

www.nina.no

Sea trout at Vatne, Møre og Romsdal





Vatne catchment

The Vatne catchment lies at the head of Vatnefjord, Møre og Romsdal, and consists of two



rivers (Storelva and Oselva) that are separated by lake Vatnevatnet (0.9 km², depth 31 m). Storelva is an important spawning and juvenile recruitment area for salmonids.

Fish community

Both resident brown trout and migratory sea trout are present in the catchment, in addition to Atlantic salmon, European eel and three-spined stickleback.

Research activity at Vatne

The national monitoring program for salmon lice on wild salmonids (NALO) has activities in the Vatne fjord, including assessing the

number of salmon lice on sea trout. Captured sea trout are measured and weighed, and examined for lice and PIT (passive integrated transponders) tags, before they are returned to the sea.

What are sea trout?

Sea trout are a form of trout (*Salmo trutta*) that choose to migrate out to sea to increase their food supply. Both sea trout and resident brown trout spawn in freshwater, and both sea trout and brown trout can originate from the same parents! Sea trout usually grow much faster, larger and produce more eggs than resident brown trout that stay in freshwater their whole life. This makes sea trout important for maintaining good stocks of large trout in the Vatne catchment.

Why examine sea trout?

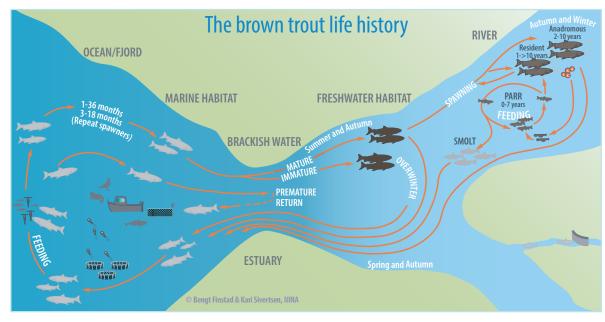
Many Norwegian sea trout stocks have experienced severe declines due to man-made problems both in freshwater and the sea. It is important to understand which problems threaten the local sea trout stocks, to ensure healthy sea trout stocks for the future.

Monitoring of sea trout

Since 2014, NINA has studied the migration patterns of Vatne sea trout. Here, sea trout are individually identified with a PIT tag, and their movements out to sea and back to freshwater are recorded by an underwater PIT antenna in the Oselva river. As sea trout face many dangers at sea, not all individuals will return to Vatne. In 2020, approx. 53% of sea trout successfully returned.

New research activities for sea trout in 2021

In the Autumn 2021, we will improve the Oselva antenna system by replacing the square antenna in the lower concrete threshold with a U-shaped antenna and installing a new antenna in the upper concrete threshold. This will improve the detection of PIT tagged sea trout in the Oselva during their out- and return-migrations. Overall, this will enhance our understanding of the sea trout population's status in the Vatne catchment.



The life history of sea trout. Brown trout can have both resident and sea-migratory forms (i.e. sea trout). The same parents can produce both forms. Immature sea trout can stay in the sea for several months or years, and may have yearly migrations.



The PIT antenna at the Oselva river mouth which continuously monitors the out- and return-migration of sea trout. (Inset - a 12.5 mm PIT tag)