issues

STAR ODDI



Measure Long-Term Acceleration Derived Activity and Heart Rate in Fish



We are happy to announce the newest additions to Star-Oddi's DST family: the <u>DST centi-ACT</u>, activity and temperature logger, and <u>DST centi-HRT ACT</u>, combined activity, heart rate and temperature logger.

The new loggers give researchers the opportunity to measure acceleration derived activity and identify correlation between temperature and heart rate.

Overview of changes in fish activity over time

The logger makes it possible to view overall changes in the fish activity over time. It is suitable for use in behavior and stress response studies, in the field of fish physiology. Adding a heart rate sensor is optional.

Suitable for long term studies

The activity loggers have a battery life of over 3 years (at 1 minute sampling intervals), for the DST centi-ACT, and 19 months (with sampling interval of 10 min), for the DST centi-HRT ACT. The loggers are especially useful when a comprehensive data set throughout the research with no disturbance to the fish is needed.

Study on the Foraging Behaviour of Leopard Seals Reveals Shallow Diving Patterns



Although leopard seals are a prominent part of the Antartic ecosystem, little is know about their foraging behaviour and impact on the ecosystem. In order to learn more about their diving and haul-out pattern a team of scientists from NOAA and the National Geographic Society tagged a number of adult female seals during a seven year period.

Among the tagging equipment used was <u>Star-Oddi's temperature and depth DST milli-TD</u> <u>loggers</u>. For visual observation the seals were also tagged with the National Geographic's Crittercam.

Nocturnal, shallow divers

During 229 foraging trips over 40,000 postfilter dives were recorded. The duration of the dives averaged between 1.23 to 2.20 minutes, but the longest dive recorded was nearly 23 minutes which is actually the longest dive by a free-ranging leopard seal ever recorded.

The data revealed that the majority, 90.1%, of the dives were shallow at 30m or less. The diving took place mostly during the night. For haul-out the seals took advantage of the daylight with the behaviour peaking at 1400 hours.

To learn more about the study please click here

Published Research using our Sensors



You can view an extensive collection of scientific papers and posters using our sensors in various types of aquatic and fisheries research which can be found on our website. To view the research, please click on the following link.

If you have a story or research to share with us, please contact us.



Star-Oddi Online

Now you can find product updates, video tutorials and general information about Star-Oddi on:



New Feature in Star-Oddi's Small Salinity Loggers: Speed of Sound



We now offer a new feature in our <u>small salinity loggers</u>. Users can now view the speed of sound for each measurement which is calculated from salinity, temperature and depth.

Fun Fact: The Unique Natural Life at Lake Mývatn



When visiting Iceland yo should be sure not to miss a trip to lake Mýva and its vicinities. Surrounded by lava pilk and pseudocraters, The lake is situated in the north of Iceland in an active volcanic area nea

the volcano Krafla. Mývatn literally means Midge-Lake which refers to the swarms of midges found there during the summertime.

The lake is known for its rich birdlife and is identified as an Important Bird Area. Mývatn is an euthropic lake, meaning that it has high biological productivity. The abundant nutrients attract a large



number of ducks and the lake provides a nesting ground to a whopping 13 different duck species! The biggest species are the tufted duck and the greater scal



Another natural phenomenon found in the lake are Marimo or Cladophora balls which is an extremely rare form of algae where it grows into the form of a green ball. Unfortunately the algae species seems to have

disappeared from the lake in the last few years, although there are signs that it might be returning.

Data Storage Tags - DSTs

Star-Oddi has been manufacturing and developing DSTs since 1993. The data loggers are used for various studies, such as fish tagging, fishing gear studies and oceanography. You can find our whole product range <u>here</u>. The following sensors are available:

0	Temperature
\bigcirc	Heart Rate
	Pressure
\bigcirc	Conductivity
0	Tilt
\bigcirc	Magnetic Field Strength
0	Light Intensity