



Project OspreyTrack

A project of the Squam Lakes Natural Science Center funded by:
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E13 – Space Age Ospreys

Teacher Notes

When scientists launched the first Earth orbiting satellites in the late 1950's they had little idea of the impact this technology would have on the study of bird migration.

The people of medieval Europe believed that birds like swallows spent the winter in mud at the bottom of fish ponds. Hundreds of years later people accepted that many species of birds fly large distances to spend our winter in the more hospitable climates. This information came from researchers who fitted leg bands to birds. However the system of leg bands depends upon the bird with the band being spotted or more often found dead. Birds banded in the United States were found in South America and visa versa. So we knew about migration but little was known about the routes the birds took, or how long it took them to fly from one country to the other.

Into the Space Age

Advances in computer and satellite technology have led to huge advances in our knowledge of bird migration.

This small unit weighs only 30g—about the same weight as five quarters. It is worn like a mini backpack secured with Teflon straps which are sewn together at the front. The device includes a solar panel to power it and a device that can send information to satellites orbiting the Earth. This information includes a hourly GPS coordinate, as well as data about the birds speed, direction and altitude. All this data is sent to the satellites every three days and these satellites then relay this information back to receiving stations on Earth.

More information about how it works, together with an animation can be found on at this link:

<http://www.argos-system.org/web/en/67-how-it-works.php>

Follow our tagged Ospreys at:

http://www.nhnature.org/programs/project_ospreytrack/osprey_maps.php



Image: Osprey legs with bands. The codes on the bands are unique to each bird.

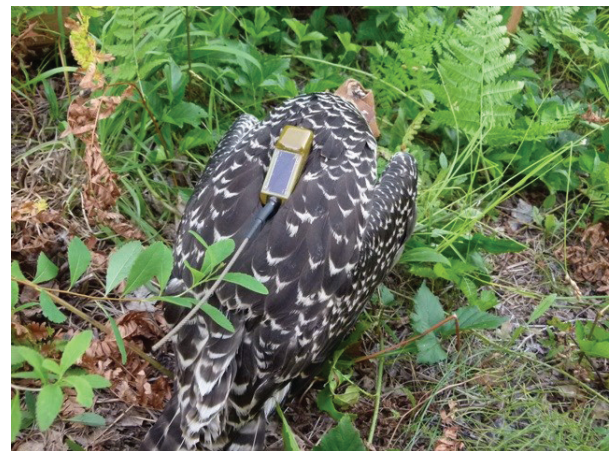


Image: Young Osprey fitted with satellite tracking device.