



# Wings Over Water

## *A Multi-Disciplinary STEM Education Program on Ospreys*

Designed for middle school educators, the WOW program engages students, and teachers, in STEM learning through study of the common and charismatic Osprey.

### WOW Provides:

- Curriculum aligned to Next Generation Science Standards
- STEM leadership training and support for educators
- Fun & authentic outdoor research experience for teachers and students
- Connection with raptor biologists, aerospace engineers, physicists, etc.

### A year of WOW:

#### Summer:

WOW starts with teacher education. Teachers attend an all-expenses paid, multi-day curriculum training institute, led by experts at UM and the Montana Natural History Center.

#### School Year:

Teachers implement their new STEM curriculum with support from WOW program staff. There are opportunities for field trips, classroom programming, and expert visits.

### How to apply:

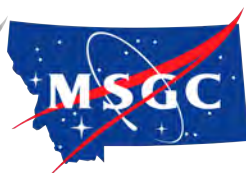
We will begin accepting new applications in winter. Until then, if you have questions:

**Contact Jenéle Dowling at the Montana Natural History Center**  
[jdowling@montananaturalist.org](mailto:jdowling@montananaturalist.org)

**406-327-0405**

**or visit [MontanaNaturalist.org](http://MontanaNaturalist.org)**

WOW is a partnership:



# WOW Curriculum

## Module 1: Osprey Biology

Students are immersed in lessons on Osprey biology, ecology, adaptation, and behavior, in the classroom and in the field (optional field trip to local Osprey nest with WOW staff).

## Module 2: Physics of Winged flight

Students get hands-on with activities on aerodynamics, flight physics, and wing design.

## Module 3: All about GPS

Students explore exciting elements of satellite technology, aerospace engineering, and GPS tracking.

## Module 4: Ospreys and the Aquatic environment

Students connect with the ecology of their local waterways, and engage in authentic research.

## WOW Institute for Teachers

Teachers can apply to be part of the program. Once selected, they will join STEM experts and researchers for a 5-day training institute at University of Montana (Missoula). Here, they will become Osprey experts, while also tailoring the WOW curriculum to their classes.

We provide lodging, great meals, and a travel reimbursement for participating teachers. We also offer 32 OPI credits and/or 3 UM graduate credits.

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**WOW connects you, and your students, to scientists working in the field.**

