

## **Osprey Nest Cam Learning Opportunities**

The osprey nest cam is part of a multifaceted approach to expand scientific literacy among sixth graders at MIT Academy. The advent of closed schools and canceled field trips due to the pandemic increased the need for distance learning opportunities. The nest cam creates an exciting distance learning opportunity not only for MIT students but for anyone with WiFi. The equipment installed allows the extraction of clips to highlight notable behaviors such as egg laying, egg hatching, chick feeding, and fledging.

The huge nest is located at the north end of Mare Island and can be seen from highway 37. Often one of the adults is perched on an adjacent pole. With a body that is 2 feet long and a wing span of 6 feet, osprey are easy to spot soaring over North Bay waters hunting for fish. During chick rearing season (spring and summer) the fish they get by diving into the water are brought back to the nest to feed their downy chicks.

Osprey exhibit site fidelity, which means that the same birds will come back to this nest year after year; offering opportunities for long term data collection and comparisons. The Friends and the students have the opportunity to identify links to osprey ecology, behavior, local history, e.g. how long have osprey been at Mare Island? Why did Island Energy originally install the nest platform? In addition the nest cam will be an eye into the nest and provide information applicable to the following state of California 6th grade science standards:

### **Structure, Functions and Information Processing**

**MS-LSI-8** Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

### **MS Growth, Development, and Reproduction of Organisms**

**MS-LS1-4** Use argument based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structure affect the probability of successful reproduction of animals and plants respectively.

**MS-LS1-5** Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.