



STATISTICS OF OSPREY DIVES AT POHTIOLAMPI IN SUMMER 2010

Pohtiolampi Osprey Center has been regarded as one of the best places for osprey photography in the world. This is because there are six bird hides located in the immediacy of ospreys' popular nutrition pool. Before, however, there has been little research concerning ospreys' famous preying dives into the water at Pohtiolampi. In spring 2010, Pohtiolampi's setting was recognized to be suitable for gathering reliable information about these dives. For this purpose, a webcam was put up on June 18th on the outside wall of one of the bird hides.

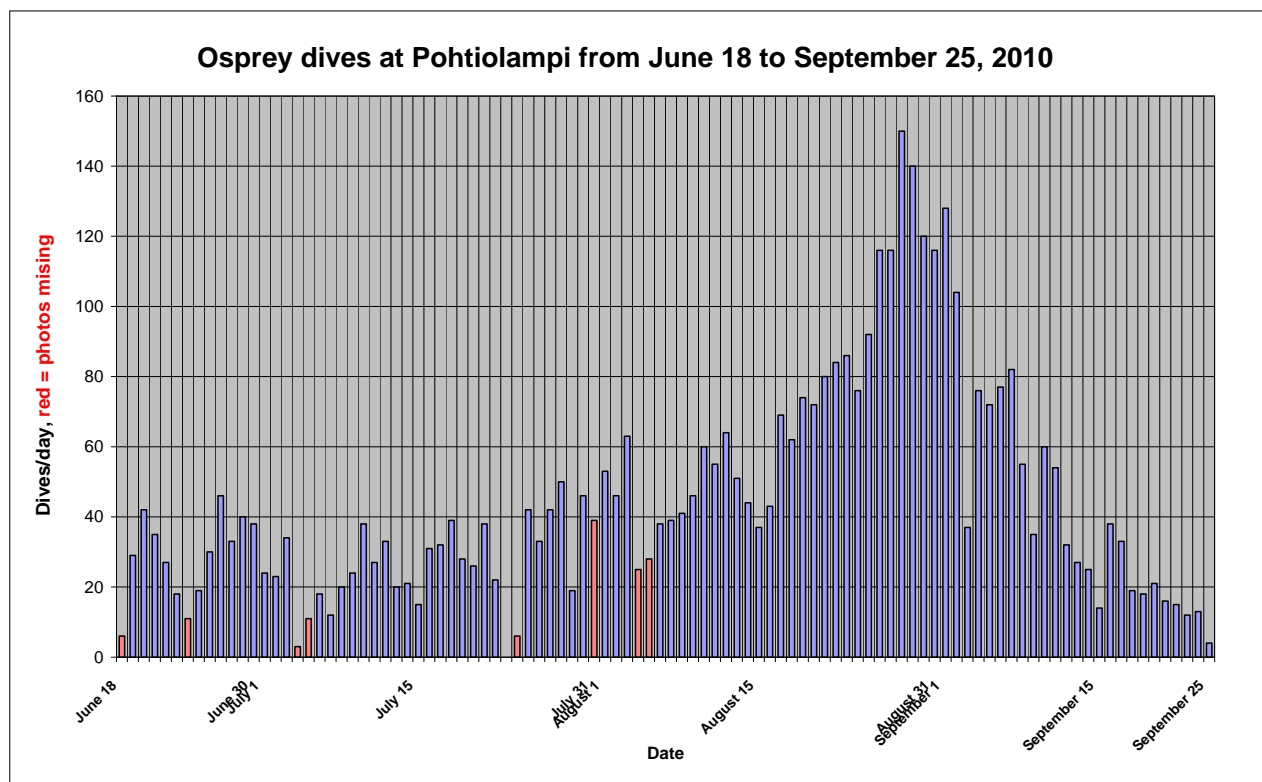
The webcam recorded activities at the nutrition pool in every three seconds. This time frame was chosen to ensure that every prey dive would be recorded. The images were automatically uploaded to the Osprey Foundation's server via a 3G network and broadcasted online in every 4-8 seconds. These images proved to be very popular among the public, as the traffic at Osprey Foundation's website doubled. The webcam setup consisted of Logitech's Webcam Pro 9000, a Fujitsu laptop, a DNA's Sierra Wireless mobile broadband solution and an external hard drive. The system was running through YamCam software.

The webcam was up and running from June 18th to October 1st 2010. Unfortunately it was not possible to register the osprey dives during the spring time. The daily amount of photos attained ranged from 16 000 to 20 000. Altogether, approximately 1 750 000 photos were taken with the webcam. The vast amount of images was analysed with FastStone Image Viewer. It took an hour to analyze the photos and count the dives of one day.

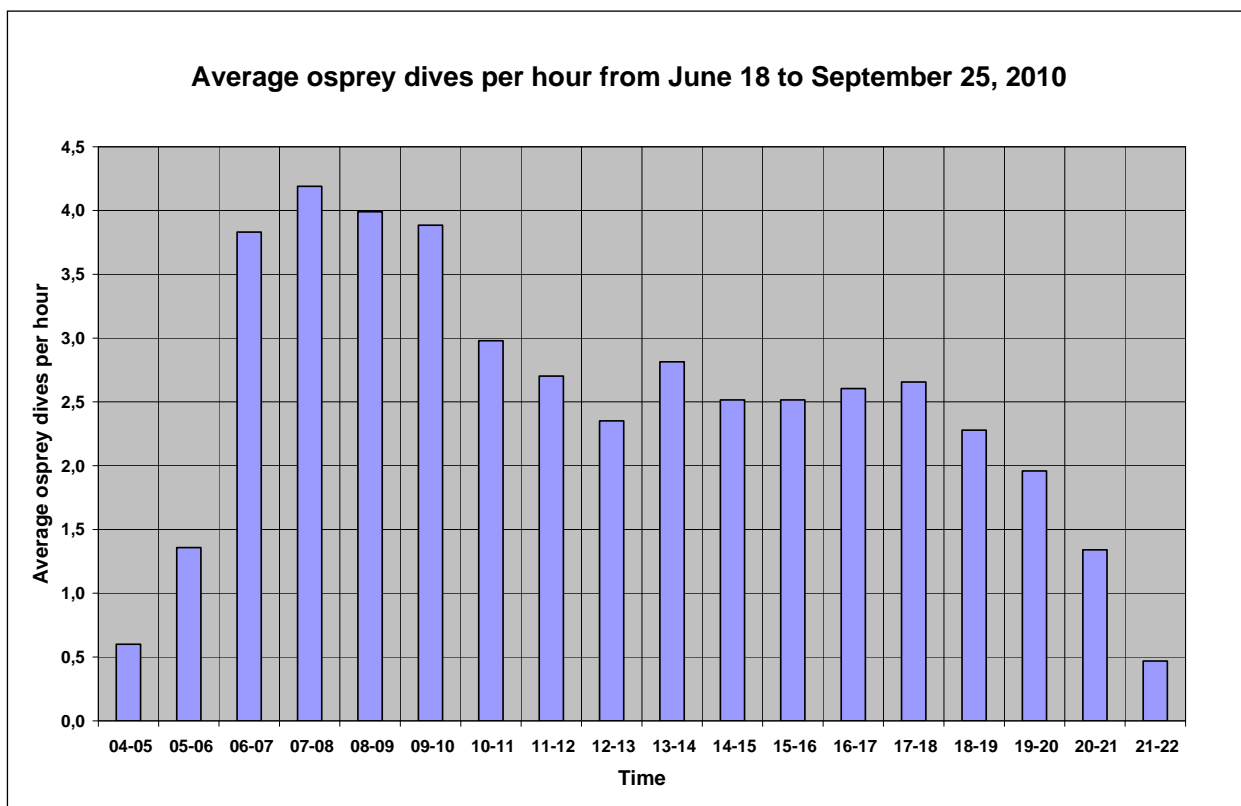
At least one photo was saved as a document of each dive occurrence recorded with the webcam. Processing of all the photos resulted in around 4 600 photos being saved of osprey dives and other observations e.g. other animals (Grey Herons, Mallards, Raccoon dogs etc).

Results

The following figure shows the osprey dives recorded on a daily basis. Altogether, there were 4 414 dives during the observation period. The daily peak, 150 dives, occurred on August 28th 2010. Dives ended on September 25th, as all ospreys began their fall migration. It can be estimated that the hot and light wind summer season (from July to the beginning of August) is likely to have reduced the number of dives compared to a normal Finnish summer. (Red columns in the diagram represent days during which it was not possible to record all photos for e.g. technical reasons.)



The figure "Average osprey dives per hour" shows the average hourly rates of osprey dives from June 18 to September 25 between 4 am and 10 pm. Most dives (3-4 dives / hour) occurred in the morning hours, namely between 6 and 11 am. After that, the ospreys dived into the water on average 2-2.5 times per hour until 8 pm, when the number of dives decreased.



The figure "Average dives per hour on a monthly basis" shows the monthly differences in the number of osprey dives per hour. In June-July, ospreys dived on average usually 1-3 times per hour. In August - September, when also the females and their young ospreys stayed at Pohtiolampi, the average number of dives doubled, or even tripled, compared to earlier summer months. The so-called prey training period of young ospreys just before the fall migration resulted in increased dives. As the period of sunlight decreased in the autumn, the early morning hours (4-6 am) and the late evening hours (9-10 pm) showed fewer dives compared to the summer season.

