

## **What do we really know about ‘our’ eagles?**

### **People and Eagles in Sauk Prairie**

By Jeb Barzen and Rich Van, Ferry Bluff Eagle Council

Most residents of Sauk Prairie have, at one time or another, approached an eagle very closely. As a result, people often conclude that eagles will adjust to most types of human disturbance. Though eagles often do adjust to our presence there are limits to this flexibility. Past articles in this series have described where human disturbance has exceeded an eagle’s ability to adjust.

The greatest potential for the proposed Nonn development to disturb eagles focuses upon Eagle Island and how eagles respond to human use near this popular perching area. Though eagles often flush from their perch at distances of up to 400 yards from people walking in the open between the eagle overlook and Eagle Island, eagles will sometimes not flush when people are located much closer. Eagles have not flushed from the presence of people at the bait shop or the auto yard when those businesses were active because people were either in the buildings or hidden behind an extensive wall of vegetation. Estimating the response of eagles to people therefore depends upon what people do while in the building, or how many people are in the building, and not upon the presence or absence of the building itself.

The businesses being replaced, for example, didn’t have large windows on the river side nor did they have people walking outside of the buildings on the river side. What people do in a residence like the proposed Nonn condominiums, on the other hand, is very different with respect to disturbing eagles. How eagles will respond to the types of disturbances typified by many residences that are located so close to an important eagle perch is unknown.

When eagles are flushed from their perch because of humans approaching too closely they tend to re-perch along a different stretch of river. Additional disturbances will flush and move birds again. As the number of disturbances increases, the amount of time that an eagle can forage while perched along the river (an important energy-saving behavior in winter) decreases. From the perspective of birds perched on Eagle Island this evaluation becomes an exercise at estimating how many eagle flushes from the island it will take before eagles will not have enough time to effectively forage from that area of the river.

If an intrusion occurs each time a person creates a disturbance that is sufficient to flush an eagle from Eagle Island then one intrusion over an eight-hour day means that an eagle can expect to remain perched for an average of four hours before being flushed. With three intrusions, the average time to flushing is 2 hours and 10 minutes; at five intrusions it is an hour and a half; at seven this time is reduced to one hour and at nine intrusions eagles would average about forty five minutes between flushes. The relationship is non-linear because an intrusion is not counted as a disturbance if eagles haven’t had enough time to re-filter into the given stretch of river.

The current level of intrusions per day in downtown Prairie du Sac is about five. This means that eagles typically remain perched an average of an hour and half before being flushed from the area. Eagles, therefore, are tolerating some level of disturbance without abandoning the use of Eagle Island. Decreasing the number of intrusions by two would increase the time to flush by 44%; something that could significantly increase the amount of eagle activity downtown. Alternatively, going from 5 to 7 or 9 intrusions decreases the time to flush by 33% and 50% respectively. Such changes would likely reduce eagle use of the downtown area.

Beyond approximately 10 intrusions per day the eagles may abandon the downtown area altogether. The reason for this prediction is that the time to flush doesn't change much; any returning eagle would soon be flushed again without being able to forage (i.e. perch) very long. Without foraging opportunities eagles would shift to less disturbed stretches of river or leave the area entirely. With an idea of how many intrusions it might take to cause eagles to abandon the island, FBEC next estimated how many intrusions the Nonn development might create for eagles perched on Eagle Island. This analysis will be presented next week.