Observations on nesting Swainson's Hawks in Illinois, 2002-2004

with comments on their conservation and future

by Robert and Anita Morgan

Swainson's Hawks (*Buteo swainsoni*) have a wide breeding distribution in North America with the main range extending north to Alaska and south to Mexico; west to California, and east to Minnesota, Kansas and Iowa (Johnsgard 1990). Extraordinary to this main pattern is the small isolated enclave in northern Illinois–the only regular breeding location east of the Mississippi River, and some 565 km (350 miles) from the main area.

Although there are isolated breeding records for Illinois in 1875, 1900, 1947 and 1958, (Bohlen 1989 and Kleen et al. 2004), it was not until 1973 that a population of five nesting pairs was discovered in Kane County (Keir and Wilde 1976). In 1983, Joe Milosevich found four nests in the same area (Bohlen 1989). This population has persisted until present (see Breeding Season Reports in *Meadowlark*), but no detailed survey has been conducted since 1983.

In 2002 we decided to conduct fieldwork in Kane and McHenry counties to determine the number of pairs in Illinois and their breeding success. Fieldwork began 12 July 2002. We made 10 visits to the area (see definition below) ending 28 September. In 2003, we made 15 visits between 18 April and 7 September. In 2004, we made sixteen visits between 24 April 24 and 19 September.

Swainson's Hawk drawing by Brian K. Willis.

We searched an area of 95 km2 (37 square miles) that consisted of rolling hills dominated by a mixed agriculture of cornfields, soy beans, hayfields and pasture, as well as some dairy and horse farms. The townships of Marengo in McHenry County and Hampshire, Starks and Huntley in Kane County bound the area we searched. This area is shown in the Swainson's Hawk map for the *Illinois Breeding Bird Atlas* (Kleen et al. 2004). Hedgerows and small woodlots border the farm fields and provide nest sites; however, this area is rapidly changing with housing developments taking up ever-increasing acreage, and land-for-sale signs springing up everywhere.

Our method of fieldwork consisted of driving along all the roads in our study area between 9 a.m. and 5 p.m. We concentrated on looking for soaring birds and stopped at numerous vantage points to scan the sky, although road conditions made it impossible to stop at all suitable sites. We found it impractical to look for perched Swainson's Hawks, as these birds can be well hidden. In suitable weather, Swainson's Hawks spend a great deal of time soaring and can be observed up to a mile away. Even if we could not immediately identify a distant soaring hawk, it eventually gave away some clues that helped clinch identification. Compared with Red-tailed Hawks (*Buteo jamaicensis*), Swainson's Hawks have long narrow wings and hold their wings in a distinct dihedral position. They rock and teeter like a Turkey Vulture (*Cathartes aura*).

Within close range the distinctive plumage differences of the Swainson's Hawk can be observed. Intermediate or dark morph Swainson's Hawks are much more difficult to identify. These are much rarer than light phases throughout North America; however, one of the fledged young from a northeastern Illinois nest we found in 2004 was in an intermediate or dark phase plumage. This juvenile was quite different from all the others we had seen. It had dark underwings and body (the wing coverts were slightly paler than the flight feathers) and the tail was dark with contrasting pale undertail coverts. The plumage was very similar to the juvenile dark morph photograph SH13 in Wheeler and Clark, 1995.

When we found a soaring Swainson's Hawk we followed it as it quartered the sky, going a mile to the east, turning, going a mile to the south, to the north, turning and so