busting weekends to make sure that all of the priority quadrants were censused at least once during the six-year study period. In all, 216 species were observed in the state during the study period and 183 species were reliably considered nesters.

#### Data entry and map-making

While most bird census takers enter their data today directly into on-line data bases via web sites, way back in the early 1990s, field data came in hard copy. Montgomery and staff at the Max McGraw Wildlife Foundation were contracted by the IDNR to put the IBBA data into electronic form using a standard format provided by the U.S. Geological Survey's Patuxent Wildlife Research Center, which also administers the separate Breeding Bird Survey program. The U.S. Fish and Wildlife Service also provided funding for the project.

Cordle, in addition to her many other jobs at the INHS, was given the mass of electronic data about three years ago to turn into distribution maps. The IBBA was the first major publication for all three coauthors and Cordle for one, said the book production was "a big learning curve for me. Everything took longer than I thought it would. It's like one of those major movies – years in the making."

Kleen said he had intended to have multiple authors write the accounts of the 183 bird species breeding in Illinois, but decided that having one author – himself – would insure more consistency in form and analysis. Kleen worked at a pace in which he produced five species accounts per day, each taking between two and three hours to compile. Kleen said he enjoyed the work, but added his wife noticed that a great many chores simply didn't get done around their house during the height of the writing period.

### Data analysis

Now that the IBBA is done, Cordle said its chief importance is in providing baseline data for future bird analysis. In addition to confirming such obvious trends as a decline in the number of confirmed grassland nesters, the IBBA data showed breeding range expansions in Illinois by species such as Mississippi Kite, Northern Mockingbird, White-eyed Vireo, Cliff

Swallow, House Wren, Bald Eagle and Double-crested Cormorant.

One important point to note about the breeding bird atlas is that it gives a six-year snapshot of the range of a breeding bird's distribution in Illinois, but not population trends. Those who gathered data worked to confirm breeding success of a certain species in a particular block. This kind of survey is different from point count censuses, which are done to determine the population or population density of one particular species within a certain area.

Cordle said one limitation of the IBBA data was in documenting numbers of colonial nesters in the state, since the protocol required that the same one-sixth block be surveyed in every quad. Many known colonial nest sites in Illinois simply were not located within the designated survey area and aren't included within the data.

But what was most obvious from the IBBA data, Cordle said, is that another breeding bird atlas survey is needed. "These data are really valuable and it was important to publish it to do justice to all these people who contributed to the Atlas.

# Atlas memories\_

Remember stomping through fields, mosquito-infested woods and wetlands to do the breeding bird atlas? Here are three memories from Kane, Vermilion and Lake County atlas volunteers. Perhaps they'll remind you of some of your interesting encounters while out confirming the success of Illinois' breeding birds.

### The sting of a sparrow

Mary Jane Easterday sat for two hours in 90-degree heat in Vermilion County waiting for a Henslow's Sparrow to run to its grassland nest so she could confirm the species as breeding. During the wait, she got stung by seven bees, but said the welts were worth it.

#### To cheat or not to cheat

Margaret Mechtenberg admitted she was tempted to cheat and declare the Warbling Vireo as a confirmed breeder in Kane County. That species and the Common Yellowthroat were the most frustrating for her. And yes, she remained honest on her tabulation sheets. Warbling Vireo, in her block, remained on the probable, but not confirmed list. But she got the Common Yellowthroat when she observed a male doing its courtship display right in front of her.

## But, mister, I was only birding

Sheryl De Vore put her life in jeopardy trying to confirm the breeding success of a Bobolink in Lake County. While standing on the edge of a hay field watching a female Bobolink through her binoculars, DeVore heard a "kaboom." The farmer who owned the field was shooting his gun into the air to scare DeVore away. It worked, but not before she confirmed Bobolink as a breeder when the female plunked a tasty morsel into a youngster's mouth.