It's no contest, but with up to 34,000 waterfowl wings to identify in one week, biologists and volunteers need to find answers on the fly.

The Wing Bee

Story and Photos
By Joe McFarland

U.S. Fish and Wildlife Service biologist Woody Martin of Maryland is part of the team of experts who travel to Illinois for the annual wing-identification marathon.

For waterfowl hunters, identifying birds overhead in dim morning light is essential. Flight patterns and wing movements help sort the mallards from the mergansers, the wood ducks from widgeons; it's all part of the sharp-eyed expertise required to be a good—and legal—waterfowler.

For biologists and volunteers participating in the Mississippi Flyway's annual Wing Bee in Carbondale, identifying waterfowl is equally critical—yet these experts also must decide age, sex and species of the bird based only on one wing.

And they need to do it fast.

"Depending on the year, we might identify between 28,000 to 34,000 wings in less than a week," explained Mike Eichholz, a waterfowl ecologist at Southern Illinois University in Carbondale. The data collected during these five-day feather frenzies get sent to the U.S. Fish and Wildlife Service's Division of Migratory Bird Management in Maryland where federal officials compare breeding survey data from Canada the previous spring against the hunter results in the fall and winter.

"It all started back in 1951," said Al Novara, retired Department of Natural Resources biologist and former head of the Mississippi Flyway Wing Bee. "Back in the early 50s, Fish and Wildlife knew how many duck stamps were being sold…but they didn't know what impact the hunters were having."

Enter the wing collection program, one for each of North America's four major flyways. Selected hunters were given envelopes and asked to submit one wing from each of the ducks they bagged that season. After the close of the season, waterfowl experts gathered to open the envelopes and fly through a marathon session of identification. The data collected indicated which ducks within a population were being bagged most often. It also signaled potential problems within populations, such as poor survival of a year class.

"It takes a lot of practice," Novara admitted. "But, it's like anything else you do for a long time, you get better—and you get more accurate. Our accuracy has been about 98 percent."

Combined with the National Migratory Bird Harvest Information Program, which records the number of migratory birds taken by hunters, the Wing Bee gives waterfowl managers a chance to fine-tune harvest data.

"It tells us the biology of the ducks, not just the numbers," Eichholz said.