

A Tale of Two Grouse



By Bill Igo

From 1996 to 2002, West Virginia Division of Natural Resources wildlife researchers trapped, banded, and placed radio transmitters on hundreds of ruffed grouse (known locally as pheasants in some Mountain State areas) on two study sites in Greenbrier and Randolph counties as part of the Appalachian Cooperative Ruffed Grouse Project.

Essentially we wanted to determine survival or mortality (how many live, how many die, and what kills them) and productivity (hen condition, clutch size, hatching rates, chick survival). Tracking birds with radio transmitters also revealed important or interesting information such as habitat use, home range and dispersal movements.

Here are the accounts of two selected grouse that we caught, radioed, and tracked until they met their ultimate demise or their radios failed.

BIRD WV 10

A juvenile hen was captured September 13, 1996. Born that spring, she weighed just over 1 pound and received aluminum band WV10 and

a backpack radio with frequency 150.583. She stayed in the capture area until October 10. Between October 10 and 17 she made a movement of more than a mile from her capture site, crossing a secondary blacktop road. Between October 17 and November 11 she covered more territory (back and forth about one mile) before “settling down” in an area that we would not define as typical grouse habitat. She lived in a mixed white oak-white pine sawtimber stand (trees more than 9 inches in diameter) with a dense understory (shrubs and small trees) of white pine and mountain laurel. She stayed there during the cold, snowy winter months, occupying only a small territory.

In mid-March she started big movements to and fro again, eventually settling about another mile away from her winter haunts in and near a

Hen WV10 stayed in her winter haunts until she started a movement back to her boyfriend in the Monongahela National Forest clearcut.

small clearcut. This is typical grouse habitat -- abundant small saplings! Here we could hear a male drumming and could only assume that she had found a boyfriend as she stayed near this vicinity for the next two months. It appeared that she started laying her eggs in early April, and was on the nest with a completed clutch in a poletimber stand (trees between five and nine inches in diameter) by the end of April or first of May.

She successfully hatched her brood between May 18 and May 22. A brood check on May 23 revealed she had chicks but a count was not attempted due to cool weather and

concern for her young. She was very aggressive, flopping herself at us and performing the broken wing act—trying to lure us away from her chicks.

A follow-up check on June 5 revealed four chicks in a sawtimber area that had recently been burned by a wildfire—leaving ideal brood habitat with little woody understory and abundant growth of knee-high white snakeroot. This snakeroot provided a small “forest” for the chicks, and was full of insects, including small grasshoppers, which are critical in providing necessary protein for the survival of growing poults.

Hen WV10 stayed in this general vicinity until October 10, 1997. Then between this date and October 16 she made a big move—back to her winter haunts of 1996! Here she stayed until mid-March 1998 when she started a movement that she completed by April 2 -- back to her boyfriend in the Monongahela National Forest clearcut. Radio signals indicated she had completed her clutch and began nesting on April 29, about the same time as in 1996. On April 9 we flushed her off her nest of 11 eggs—in the same poletimber stand in which she had nested the year before. That afternoon she was back on the nest.

Between the May 14 and May 19 she successfully hatched 10 eggs and moved the chicks about one mile into the same nesting area as in 1997. She was flushed with five poults in June. She again showed her aggression by flying at personnel, vocalizing loudly and doing the broken-wing performance. She stayed in this area until her radio battery failed. The last contact we had was on September 28, 1998.

We discovered that this hen had three distinct home ranges: 1) a winter area of sawtimber with white pine-mountain laurel understory, 2) a nesting area about one mile away consisting of a clearcut with adjacent poletimber stand, and 3) a brood-rearing area another mile away made up of sawtimber oak with herbaceous understory. Another mile brought her back to her winter dwellings!

BIRD WV 434

An adult male was captured on the east side of Greenbrier Mountain in September 2000 and received band number WV434. He was tracked through the fall and winter in the vicinity of his capture, occupying a small home range typical of adult males. One Monday in mid-January 2001 we were unable to pick up a radio signal for his frequency. Because the last normal signal we had received was on Friday morning, we determined that he disappeared between that time and Monday afternoon.

This area was closed to hunting as part of the research to determine effects of hunting on grouse populations. I received a call the following Thursday from the Elkins office reporting a hunter had called saying he had killed a banded/radioed grouse and wanted the reward. All aluminum leg bands carried the phone number and address for the Elkins office with "REWARD" also stamped on them. The backpack radios also contained the same information.

I contacted the hunter that night, telling him that I needed the radio and leg band and to get particulars on the kill site and kill date along with other information.

I pulled into the driveway and met an obviously nervous individual. In the subsequent interview he stated that he and his buddy were hunting on Saturday in an area not far from his house—on a mountain across from the Greenbrier River which is located across from the west side of Greenbrier Mountain. Since I had (conveniently) not brought my maps, I told him I needed to meet at a later date to plot the exact kill location. In response to his repeated requests for the reward I told him it would be taken care of.

The next day I contacted the person who had last tracked WV434. He reported that on the past Monday he had noted vehicle tracks pulled alongside the old haul road that intersected WV 434's territory. He found human tracks lead-

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ing from the vehicle, going over the bank of the road and coming back. At the base of the bank were scattered grouse feathers. Someone had illegally killed a grouse on the study site, within the range of WV 434, who was now no longer "Missing in Action."

I made arrangements to meet with the hunter over the weekend and brought along our tracking and plotting maps. He again met me in his driveway. I told him to get out of the cold and get into my vehicle. I first asked him to show me as best he could on topographic maps where he had shot WV 434. He fumbled a bit, but eventually pointed to a steep area along the Greenbrier River more than two



miles from WV 434's home range. He then requested his reward and also wanted a reward for his buddy. Since the band "said" "REWARD" he thought turning in the radio and the band deserved separate rewards.

I brought out my study area map which we used for tracking and showed it to him. I then said, "Let *me* tell *you* where this bird was killed." I pointed to the location where our tracker had found the feathers over the bank. I calmly stated, "This bird was shot here on the ground along the road from a vehicle on Saturday. The bird flopped over the bank and was retrieved by you—that bird being WV 434!"

Flustered, red, and shaking, the hunter stammered that where he said the bird was killed was the truth. I then pointed out that the DNA of the feathers obtained at the kill site could be matched to DNA of feathers collected when the bird was caught, and that if the "real" truth was not admitted we would also issue citations to his "buddy." At this point the hunter broke down, confessing that the tale of WV 434's death was exactly at the place, date and manner I had described -- "Except," he stammered, "it wasn't on the ground, it was sitting in a bush!"