

SEPTEMBER

By Ken Solomon

"September Hens"

The lazy months of September and October provide a well deserved rest for the hens. After the rigors of mating, producing 30 to 50 eggs, incubating a clutch, brooding young, and losing and regrowing feathers, the hens need a rest. In contrast, the cocks have been taking it easy since late July when they finished molting their feathers. Also consider that the cocks had no incubation or brood-rearing responsibilities. The hen, though, has lost 25 percent of her body weight since April. In September she has reached her lowest weight (1.9 lbs) and her lowest body fat content of the year. Since the amount of body fat is a good indicator of overall body condition, the hen is in her worst condition of the year. Many believe that this situation occurs during the cold winter months, but the reproductive process often causes more stress than even Old Man Winter.

"No Chicks to Raise"

The chicks produced last spring will stay with the hen until they are 10 weeks old then start moving off on their own. Like your own children, their independence grows with adolescence, and they soon leave home. The hen is now free from the demands of raising her young and can start caring for herself. It is time to start preparing for winter. The first thing to happen after the young are gone is the expanding of her home territory. When brooding her chicks the hen used 37 acres around her nest, but by September her territory doubles to 71 acres. It is unknown whether this expansion is caused by her increased energy demands, or just by the joyous freedom of having no young to raise.

"Adult Food Intake"

With daily temperatures decreasing, it is important that both cocks and hens begin conditioning the bodies for the freezing months to come. In order to accomplish this, they must consume more energy in order to produce muscle and body fat. Remember that the hen has lost a quarter of her weight since last spring. So the pheasant's food intake must increase during these months. During August, September and October the weight of the food in a pheasant's crop does increase about 20 percent over that in May, June and July.

"Hen Molt"

A good portion of the pheasant's increased energy intake during September must go to producing feathers for the hen or producing fat for both hen and cock. Concerning feather production, the adult hen started molting her feathers in July and will have regrown her entire plumage by October (90 days). The energy cost of feather production to pheasants is unknown. However, for cowbirds, sparrows, and other songbirds, feather regrowth requires a 7.6 to 13.0 percent increase in energy intake. It is known though that when molting pheasants and nonmolting pheasants are stressed, the molting birds die

sooner. So molting does place extra energy demands on the birds.

"Chick Foods"

While young pheasants are still smaller than adults during September, the young consume as much food as the adults. Both the composition of the young's diet and their use of the energy are different from the adults. While the young consume only two-thirds as much crop grains as adults, they do consume nearly twice the amount of weed seeds, and over two and a half times the insects that adults do. This higher protein intake enables the young to continue their growth to adult size. In September, the adults use energy to produce feathers and fat, while the young use it to catch up with the adults.

Insects constitute an important part of a growing pheasant's diet. When only 2 to 6 weeks old, the chick's diet is 36.3 percent insects. At this age the young are growing at their fastest rate. As they approach adult size, their growth rate decreases, and so does their consumption of insects. In September, insect consumption has decreased to 22.0 percent. This is still higher than the adult's insect consumption of 8.3 percent.

"Chick Mortality and Food Consumption"

While the adult pheasants are taking it easy and preparing for winter, what are the young birds doing? Last spring's chicks are 11 to 19 weeks old during September and October. Of the 9.2 chicks hatched from each nest in June, 35 percent have already died. Nebraska found a 39 percent loss of chicks by September. This mortality may actually approach 50 percent, and the reasons for it are unknown.

Those young that do survive to September have been growing rapidly since their mid-June hatching, and will reach adult size in October. During these months they consume from 59 to 68 grams of food per day. This means that in only 15 weeks they have increased their food consumption 8.8 times from the 8 grams at one week old. Of course this increase has been necessary to meet the increased maintenance energy requirements of an ever larger body.

"Pheasant Migration"

In September, many animals are preparing to leave their breeding ranges and migrate to warmer climates. While morning doves have started south, lark buntings are in Texas already, and waterfowl are gathering in migratory flocks, pheasants plan to spend the winter with you. Migration occurs for two reasons: availability of food, and furnace efficiency. If a bird's foods will be covered by snow and ice, that bird had better go to a climate where food is available. Even if food is available for the winter, air temperatures may get too low. Each bird species has a specific furnace (metabolic rate) to keep it warm. The furnace of migratory birds can not produce enough heat if they stay north for the winter. Pheasants can find the grains they need to stay in your area, and the pheasants' furnace can supply the heat needed through sub-zero temperatures.

Wintering pheasants can be found far away from grain production areas. Here, survival depends on temperature. Pheasants can live on only weeds seeds through the winter if temperatures allow it. Mild temperatures mean their furnace need not be stoked with high energy grains.

"Stress Bars"

Fault bars on pheasant wing and tail feathers were once thought to indicate levels of stress on the birds. Research found these bars to be normal feather markings, not deserving the name "stress bars." With the first rooster you harvest this fall, examine the longest tail feather by holding it up to the sky or a light. The stiff shaft that runs up the center of the feather is called the rachus. The soft, interlocking vanes that run upward and outward from the rachus are called the barbs. Sometimes there will be a fault bar running 90⁰ to the barbs. It looks like the barbs were folded across the grain, and you can still see the crease. And that is exactly what it is, a crease.

During the pheasant's molt, the barbs are growing in a feather follicle. Like flower petals in a bud, the barbs are tightly packed together. For unknown reasons the barbs may become folded, thus leaving a crease across the barbs. It was once thought that the more stress (feeding or physical) the pheasant was under during the summer molt, the more fault bars would be seen. Not true!

"Dinosaurs"

Ever wonder why the pheasant you just shot and cleaned has scales on the lower end of the drum stick, and over the entire lower leg and foot? It relates back to the pheasants' (and all other birds') first known evolutionary step away from the reptiles. It was "Archaeopteryx." Part bird and part reptile, Archy had bird characteristics like feathers, hollow bones, and being partially warm-blooded. Its reptile characteristics were clawed wings and feet, scaled head/legs/feet, lizard-type skull structure, and sharp teeth.

Even with feathers Archy could not fly. He probably used the clawed feet and wings to climb trees, and then used feathered wings and tail to glide and steer downward. The teeth indicate a meat diet, probably small mammals and lizards since Archy was only the size of a pigeon.

"Hunting Effects on Roosters"

The goal of pheasant management is to provide the public with maximum recreational opportunity, and to leave enough brood stock for spring reproduction. Ideally, 90% of the fall roosters could be removed leaving a sex ratio of 1 rooster per 10 hens, adequate roosters for reproduction. Even the high harvest states have a spring sex ratio between 1:2 (50% removal) and 1:4 (75% removal). More birds could have been placed in your freezer. Hunters normally harvest 45% to 65% of the roosters. States estimate that an additional 10% are lost to crippling, so total roosters removed from the population is 55% to 75%.

Habitat also effects rooster harvest. Inadequate cover concentrates birds and helps remove a larger portion of the roosters. Large habitat areas, like unharvested fields, though make roosters tougher to bag (Wooley 91).

"Effects of Hunting Restrictions"

Research in Minnesota (MN) and Iowa (IA) shows that restrictive seasons have no measurable effects on future pheasant numbers. Biologists made yearly state to state comparisons, over 20 years, of pheasant number data in similar habitat and weather areas (lower 2 tiers of MN counties and upper 2 of IA). During the 20 years, MN's daily limit was 1 less, and season length half that of IA. When severe winter weather reduced the population, MN closed their season for 4 years. IA did not. Despite the differences, the 2 states had mirror image population trends. MN was not stock piling birds by restricting harvest.

During the 4 closed seasons, MN had to yield to an uncomprehending public. "We must stop hunting so the bird population can grow." It did not grow more than IA's! Instead MN hunters lost 2.4 million hours of recreation and 400,000 roosters in their bag (Wooley 91).

"Timing of Hunting Season"

Next month, pheasant hunting seasons begin nationwide. Have you ever wondered why most pheasant seasons start in early to mid October? Most hunters think it's just tradition that their season starts the 2nd or 3rd Saturday of October. But how did that tradition get started? Your opening day may have been determined by crop harvest, landowner tolerance, chick age, or all of the above. In northern states, row crops are harvested in October. As harvest decreases available cover, birds congregate in remaining cover, making hunting easier. A season set too early often irritates landowners as hunters walk through and damage unharvested grains. Landowner tolerance also effects how many different hunting seasons overlap. With chores to be done, how would you like to be interrupted numerous times a day answering calls and visits from deer, grouse, turkey, pheasant and duck hunters? To effectively harvest more roosters, it is important that hunters be able to tell a young rooster from a hen. Flying chicks are identifiable as roosters at 14 weeks old and fully colored at 18 (late October, depending on time of hatch).