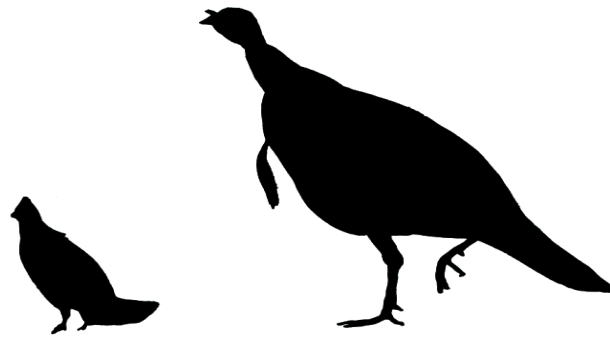


Wisconsin Wildlife *Fast - Facts*

From various sources by Christian W. Cold, WDNR Ladysmith

Current taxonomic nomenclature (“language”) represents our best effort to sort, isolate, identify, and label life forms by using distinct, physical characteristics. Wisconsin “wild fowl” are members of the order Galliformes (heavy-bodied chicken-like birds). The following treatment is limited to Wisconsin forest birds of the family Phasianidae (turkeys) and sub-family Tetraoninae (true grouse). I will informally refer to both as “grouse” because they each (superficially) represent unique-but-similar evolutionary expressions of the familiar grouse design.



Wisconsin Forest Grouse....Dwarfs and Giants



Ruffed grouse *Bonasa umbellus*
(good-when baked) (sunshade)

“There are two types of hunting – ordinary hunting and grouse hunting.” - Aldo Leopold

Synonyms:

Partridge, Pat, “benai or bine’ ”– Ojibwa (Anishinaabe)

Description:

16-19” crested, chicken-like bird with cryptic, articulate, mini-leaf-pattern plumage in tones from silver-gray to chestnut-red.

Tail has terminal band of black or (rarely) brown.

Feet are naked. Toes are seasonally fringed with comb-like scales (for traction-gripping slippery, ice-coated branches and “snowshoe” weight displacement).

Origin:

Believed to have evolved from same ancestral stock as ptarmigan, which in turn descended from primitive ancestors of lower Miocene (>12,000,000 yrs).

Range:

Rockies, Appalachians, Great Lakes & most of (forested) Canada

Wisconsin status:

Common north & central. Steady and apparent irreversible decline in southwest. Rare to absent in southeast.

Habitat:

Early successional forest and second growth, esp. in aspen w/associated conifers, small forest openings & forest edge.

Grouse success is dependent upon periodic events of forest disturbance, which results in successional sequences of supportive vegetation or "coverts".

Aspen at 3-4 yrs provides hen and brood cover.

Aspen at 8-10 yrs provides fall, winter and spring cover.

Aspen at 25-30 yrs no longer provides cover, but produces food via buds & catkins.

Aspen at 50 yrs begins decadent decline ("break-up") and ultimately disappears from site.

Behavior:

Ruffed grouse are solitary birds, which seldom associate w/others in structural groups.

Clustered birds are usually feeding and disperse without ceremony when the food runs out. Ruffed grouse feed (primarily) 2X/day – sunrise and sunset.

Weak-flighted birds, ruffed grouse appear reluctant (incapable) of traversing large open areas and water bodies to colonize new areas (unlike sharp-tails). Aside from its usual short flights up into trees (to feed) or down to the snow (to roost), a grouse in flight is probably "a grouse in trouble of some kind".

Diet:

Spring: Flower buds of quaking (primarily) & big-tooth aspen. Buds of white birch and black cherry. Also birch & alder catkins, semi-dormant & emerging insects,

Summer: Flowers of (above) aspens. Also herbaceous plants (>600 sp.), soft mast (esp. raspberry, blueberry & gray dogwood) and insects.

Fall: Hard & soft mast & late/declining insects.

Winter: Male quaking aspen buds (rich in protein, fats & minerals – female buds are considered "nutrient-poor"). Also late desiccated soft mast.

Lifespan: Potential of 8-10 years.

Population dynamics:

Cyclic (esp. in north, where aspen is a prominent component on landscape) with 10 yr intervals between peaks.

Of 1000 eggs, 262 chicks will (theoretically) survive to September.

118 birds will be alive by the following spring.

49 birds will be alive the 3rd spring.

20 birds will be alive the 4th spring.

11 birds will be alive the 5th spring.

1 bird may see its 6th year.

Mortality: (also see winter)

Cold spring rains at time of hatch may cause catastrophic chick losses.

Red-phase birds appear to be much more prone to goshawk predation than gray morphs.

Horned owl predation is probably more significant than goshawk*, especially in western and central part of state. Horned owls are also “acoustically deaf” to the low frequency (40 cycles/second) “thumps” (only this) of drumming grouse.

Fox, raccoon, skunks & crows are primary nest predators, but deer occasional factor too!

Cooper’s hawks can take all-size grouse. Sharp-shinned hawks will take small chicks and broad-winged hawks will take chicks and young adults.

Fisher influence (nest predation) is unknown, but suspected as moderate to high, locally.

Winter:

0-6” snow = tree roost.

6-10” snow = tree or ground roost (depends on snow quality)

10-12+” (soft, dry) snow = snow roost (optimal scenario)

10-12+” (wet or crusted) snow = tree roost

Tree-roosting is calorically inefficient and predisposes bird to avian predation.

A lack of snow, combined with cold temperatures poses a lethal combination for winter ruffed grouse survival.

Nesting:

Females appear to select sites near clones of male quaking aspen.

The nest is usually near or against the base of a tree or blowdown.

Up to 12 eggs in clutch. Young are precocious (mobile and active) from the start.

The tiny chicks (size of marshmallow) instinctively “freeze” in the presence of large moving objects (they snatch & gobble small moving objects).

Chicks capable of limited flight at 6-8 days.

Human dimensions:

Highly-regarded as the premier upland game bird of our beloved Northwoods.

Reassuring to hear. Breathtaking to behold. A challenge to bag. Delicious at the table.

*Goshawks typically occur at extremely low densities throughout their range. There are probably 8-10 horned owls for every goshawk in the northern forests of Wisconsin. Furthermore, goshawks are occasionally preyed upon (while roosting) by horned-owls.

Spruce Grouse *Dendragapus Canadensis*
(tree-loving) (of Canada)



Synonyms:

Fool hen, swamp or spruce partridge

Description:

16-18" An absurdly-tame, dark, dusky-brown bird with short tail (w/chestnut band on tip). Male has black breast, white barring on flanks & red comb above eye. Female thickly barred on front. Feet are entirely feathered.

Origin:

Shared similar (initial) common ancestry with ruffed grouse. According to recent mitochondrial DNA studies, the spruce grouse then separated (Pleistocene) and proceeded to evolve independently from - but in tandem with blue grouse (convergent or parallel adaptation) towards their respective coniferous forest niches. Prairie grouse divergence occurred much more recently.

Range:

Most of Canada and boreal forests of extreme northern tier of states.

Wisconsin status:

State Threatened (2007). Actually peripheral or extralimital (edge of primary range). Probably once locally common in north 1/3 of state (pre-logging era). Possibly 500-800+ birds statewide today, confined to parts of Sawyer, Bayfield, Iron, Price, Vilas, Oneida, Langlade, Forest & Marinette Counties.

Habitat:

Conifers- pines, spruce-cedar-tamarack swamps, & muskeg. Prime scenario is burned area, grown up in jack pine w/dense undergrowth and/or "blueberry barrens".

Occasional forays into deciduous forest in fall.

MN research shows birds seek jack pine as winter habitat, black spruce/tamarack bogs as spring-summer habitat. Where little upland exists, spruce grouse spend all seasons in lowland conifers.

Behavior:

Solitary in summer. Occasionally gathers in loose flocks during winter. This bird is easy to overlook as it will sit motionless while you pass within mere feet of it! Look for dusting areas in rotted powder of long-dead trees.

Movements:

Most birds are permanent resident. Some females move seasonally (on foot) up to ten miles to new feeding areas.

Diet:

Primarily jack pine needles (>90% of winter diet). This is made possible by the bacteria and protozoa in the grouse's digestive tract, which convert the needle cellulose to sugars that can be metabolized. Diet also includes soft mast (blueberries, bearberry, and bunchberry), horsetail stems & tips, the buds of white birch, salal, wood fern, Christmas fern, sedges, mushrooms and club moss spore cases.

Lifespan: 6-8 years**Winter:**

Unlike ruffed grouse, which prefer to snow roost, this bird usually seeks the shelter of dense growth and conifers. Spruce grouse spend most of their winter in trees. Birds often feed & roost in "little flocks, sometimes up to 15 together".

Courtship:

Polygamous. The male "drums" in vertical or descending flight, or while (repeatedly) walking up inclined blowdowns.

Male also fans, wags, and "snaps-shut" tail while strutting*.

Nesting:

The nest (built by female & "incredibly difficult to locate") is a shallow depression, usually against the base of a spruce with drooping branches.

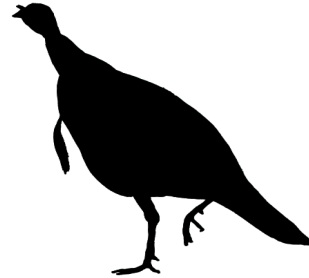
5-7 olive-buff eggs (16 recorded)

20 days to hatch

6-8 days to initial flights (like ruffed grouse)

Full size & independent at 10 weeks.

- Check out Andy Paulios video from Vilas County 2007:
<http://www.youtube.com/watch?v=18o9WTYxruc>



Wild Turkey *Meleagris gallopavo*
(guinea fowl) (cock peafowl)

Synonyms:

Gobbler, great American hen, “misisse”- Ojibwa

The name “turkey” probably resulted from an (incorrect) assumption in Europe that the birds were imported from Africa via Turkey (like guinea fowl). In reality, all domesticated turkeys in Europe today, are the descendents of birds captured in North America by the Spanish during their conquest of Mexico (around 1520).

Male: tom or gobbler / female: hen

Description:

Superficially - a “giant grouse” by design.

A large (3-4 feet tall & 25+ lbs.) and dark ground-dwelling bird w/bronze iridescence.

Slimmer profile than domesticated cousin.

Mature toms have red, white, and blue fleshy wattles & neck, “fighting spurs” on back of tarsus and long, bristly mass of modified feathers (beard) suspended from the breast (occasionally hens also).

Origin:

A North American original.

Remains of a primitive ancestral type appears in fossil record at 10 million yrs. B.P.

Several now-extinct forms inhabited pre-Columbian (>15k.BP) North America, extending as far back as the Pliocene (5-1.8 million years BP).

Range:

Formerly numerous in open woodlands (esp. South and East), then extirpated or hunted to scarcity in most areas.

Today widely distributed and numerous; managed as game bird in all (lower) 48 contiguous states.

Wisconsin history and current status:

Historical records suggest primary range was most of southwest, south central and east central Wisconsin with scattered reports from the west central border of the state. Unregulated shooting and clearing of oaks precipitated a drastic decline, with the last report of a “wild bird” near Darlington, Lafayette Co. in **1881**.

1974 – WDNR initiates exchange effort with Missouri (MO turkeys for WI ruffed grouse) with initial stockings in southwest.

Following several years of stocking, a succession of mild winters, and the rapid dispersal of birds into new areas, the species essentially established itself statewide by **2007**.

Habitat:

Oak-hickory and pine-oak forests with open clearings.

A 50/50 mix of woodland (of which 50% is deciduous) and grass or dairy agriculture.

A “good mix” of trees, shrubs and grassy openings.

Turkeys can adapt to a wide variety of conditions, provided sufficient food, roosting sites, nest and brood cover exists.

In agricultural areas, grain & hay fields may suffice as surrogate grassland component.

Behavior:

Wild turkeys are considered relatively-intelligent, adaptable, and opportunistic birds. Shy and alert, they present a challenge to the hunter (unless gripped in the throes of their annual testosterone imbalance).

Hens are vigilant and “thoughtful” mothers, who solicit chicks/poults to join them in the trees to roost at night.

Although reluctant to fly, turkeys are powerful “sprint fliers”, who can attain a speed of 55 mph for up to one mile.

Gobbler territory (averages):

spring: 500 acres (a function of breeding behavior)

summer: 135 acres

fall: 175 acres

winter: 185 acres.

Diet:

Primarily herbivorous.

Hard & soft mast, waste grain, buds & catkins, seed heads of winter grasses and sedges, roots & bulbs, insects (especially grasshoppers), spiders, snails, frogs, snakes and salamanders.

Leaves of evergreen perennials such as wintergreen & dewberry.

The legume, black medic is especially important in spring.

A recent finding that turkeys utilize the seeds of maples (break-off the winged samaras) poses significant (cautiously-optimistic) implications for the bird's future in areas (locally and regionally) once-considered "unsuitable" by resource managers. A complete & detailed account of plant foods exists in current literature.

Population dynamics & mortality:

Approximately 50% of hen cohort survives annually (barring catastrophic winter).

Coyotes and foxes factor high in hen mortality.

Coyotes figure high for tom mortality.

Fishers are suspect in north.

Horned owls are fully-capable of handling the largest of toms (a hard-pressed owl).

Turkeys in contact w/domestic poultry are at risk to lethal "black head" disease.

Winter:

Turkeys seek sheltered areas with broken topography (patchy cover, slope and exposed areas for foraging). Birds living on flat terrain experience limited mobility and increased risk of acute winter stress (mid-winter anemia or "cold weather starvation").

Under severe conditions, turkeys will roost without feeding for up to two weeks, but succumb at a 40% weight loss threshold.

In agricultural areas turkeys may survive harsh winters, provided they can access "high- quality" manure (a tribute to the marvelously-inefficient digestive tracts of ruminants).

Courtship & nesting:

Nest is a depression on ground, lined with leaves & grasses.

10-15 eggs are typical (sometimes less, rarely more), however some hens will "dump" eggs in the nests of others.

Incubation 25-31 days

Precocious young are partially-flighted at 1 week

Hen takes brood to areas rich in insects. Chicks/poults must eat 20% of their weight in insects (daily) to maintain proper growth rate.

Poults require several months to attain full size.

Human dimensions:

The wild turkey continues to capture the interest and admiration of American sportsmen as our premier game bird.

As turkey numbers increased, members of the agricultural community began to show concern over the potential impact on their commercial interests. Research shows that most crop damage claimed is actually the result of the activities of other animals.

Most agricultural food consumed (75%) was waste grain (corn & oats). The birds also provided a measure of insect and weed control in these areas.