

There's a Drummer in My Woodlot

The Ruffed Grouse



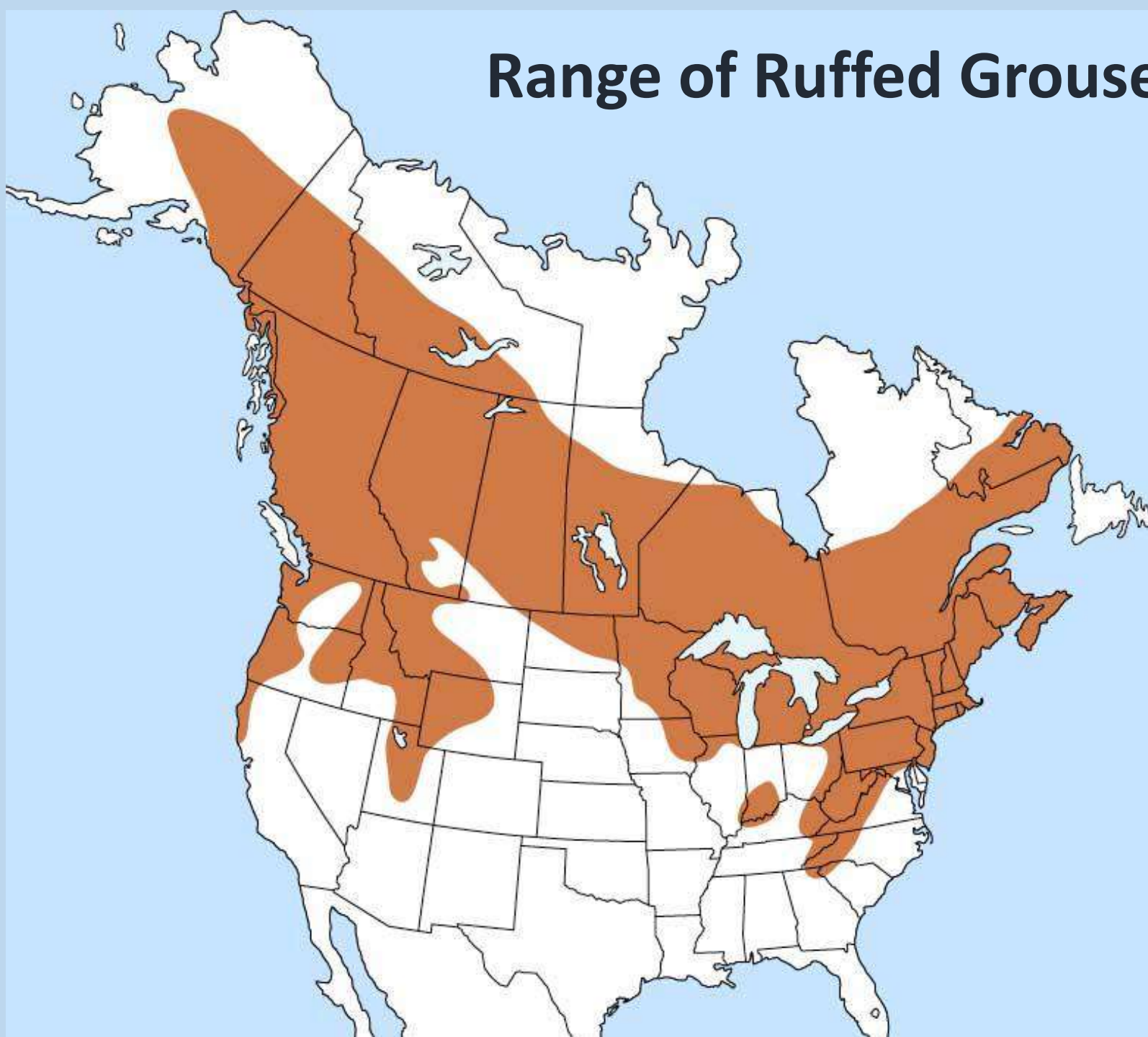
**Ruffed Grouse is one of 10
species of grouse in North
America**

And

**One of 5 species of grouse
in Ontario**



Range of Ruffed Grouse





Ruffed Grouse (*Bonasa umbellus*)

450 – 750 grams (16 to 26.5 oz or 1 to 1.6 lbs)

About the size of an American Crow



“Ruffed” Grouse



Colour ranges from gray to red.

Generally gray is more common in northern climates and reds further south in milder climates





Male



Female



Short broad wings and tail for agile flight in wooded areas



The toes of the ruffed grouse gain little projection-like extensions on their toes in the winter

Feather-covered legs, unlike most birds, to protect them from harsh winters.

Population Cycles

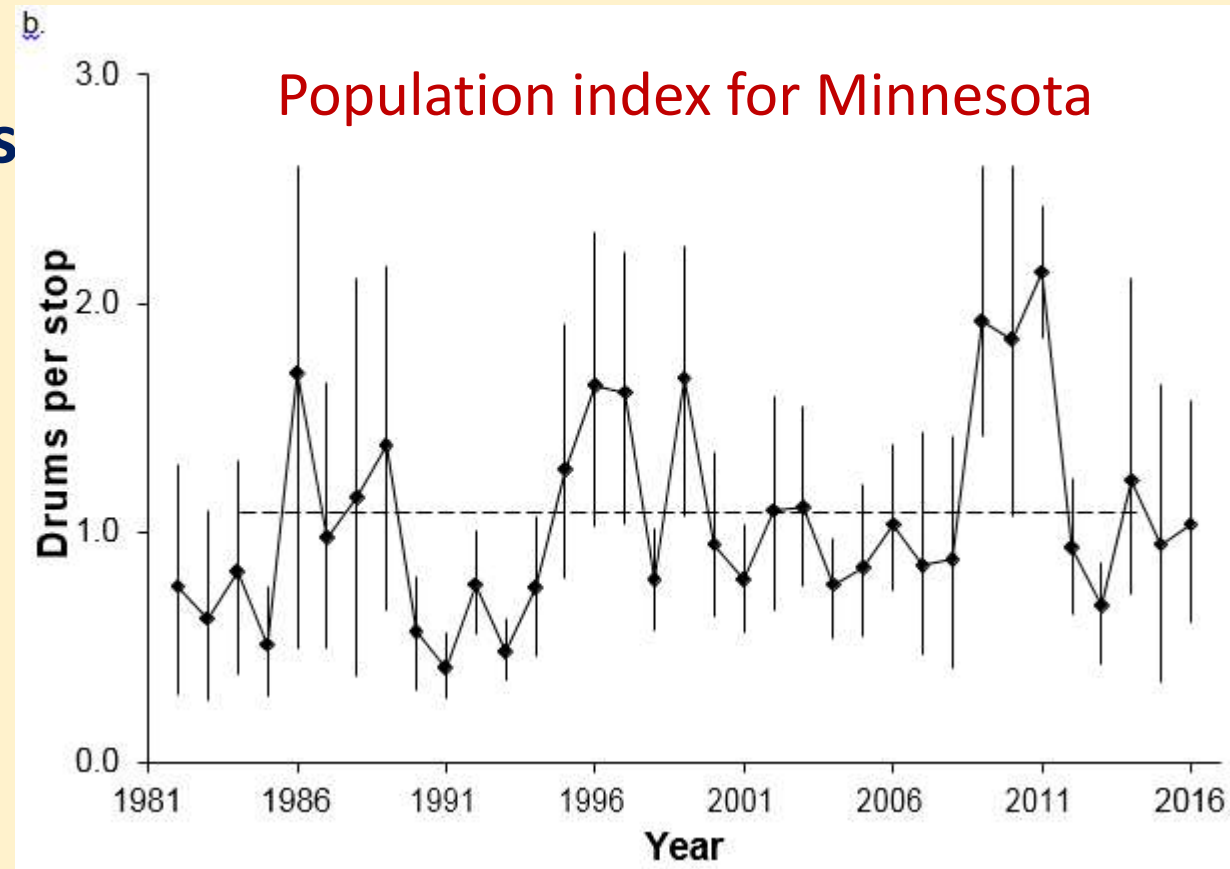
Grouse have a short life span – only 40 – 45% of chicks live to first breeding season

Starting with 1000 chicks roughly 40 will make it through the 3rd breeding season, 16 the 4th and 1 out of 2200 may live to 8 years

Many think grouse populations cycle through highs and lows roughly every 10 years

Long term trends not clearly Understood

- Genetic?
- Nodal half-cycle of moon?



Short term population fluctuations:

- **Weather trends - e.g. cold wet spring, drought (2016), ice storms**
- **Quantity and quality of food**
- **Changing habitat quality**
- **Use of herbicides in northern Ontario – loss of early succession**

Long Term Population Trends

- Loss of habitat and decline in habitat quality in NE USA and in southern Ont. e.g. SW Ontario**
- Maturing forests**
- Invasive species e.g. buckthorn**

Hunting and predation generally have little impact on ruffed grouse population trends

A Year in the Life of a Ruffed Grouse

Spring



Males establish and aggressively defend their “territory”

3.2 – 4.0 ha (8 to 10 ac)

1 or 2 females may occupy the same home range as one male

Spring foods – catkins, buds, newly emerging plants and insects



Male proclaims his property rights by “drumming”. Usually on a log, stone or mound of earth

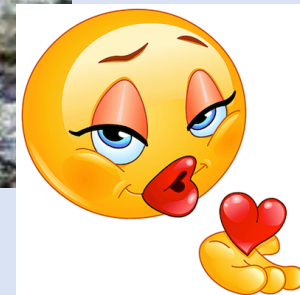


Drumming can occur any time of year – mostly spring



When the time is right the female approaches the male in his advertised territory.

And then





Nests are hollowed out depressions in the leaf litter often at the base of a tree

Must watch for predators and plan for a quick escape



Males play no role in raising the young

“Your on your own dear”





8 to 14 eggs laid, about one every 1.5 days

Incubation 24 to 26 days



Chicks are precocial

Can start to fly in 5 days



**Chicks need high protein
= insects**

Small forest openings, brush or sapling cover – early succession



Chicks grow quickly. From 14 grams (1/2 oz) when hatched to fully grown in 16 weeks

Diet in summer and early fall

- Chicks start out on insects, eventually transition to plants
- Adults feed on seeds, berries, flowers, leaves and insects, whatever is in season.



Aspen leaves are a favourite

Autumn



- Early succession forest – aspen, birch
- Fencerows – wild apple, grapes ...
- Old Pastures

Autumn Foods



Grapes



Wild Apples



Aspen Leaves



Nuts and Acorns



Hawthorn

Fall Dispersal – “crazy flight”

- About mid-October young disperse
- Males depart first – looking for their own “drumming log”
- Distance – usually within 3.0 km (1.8 mi), sometimes as far as 7.0 km (4.5 mi)
- Pass through unfamiliar habitat



Fall dispersal can
be risky



Winter

- Winter diet is primarily buds
- The sugar and protein-rich flower buds of trembling aspen are a favourite, especially the upper canopy of mature male aspen
- Also the buds and catkins of largetooth aspen, birches, alder, willow, beaked hazelnut and ironwood.
- Grouse don't store fat well so they must eat a lot of food daily

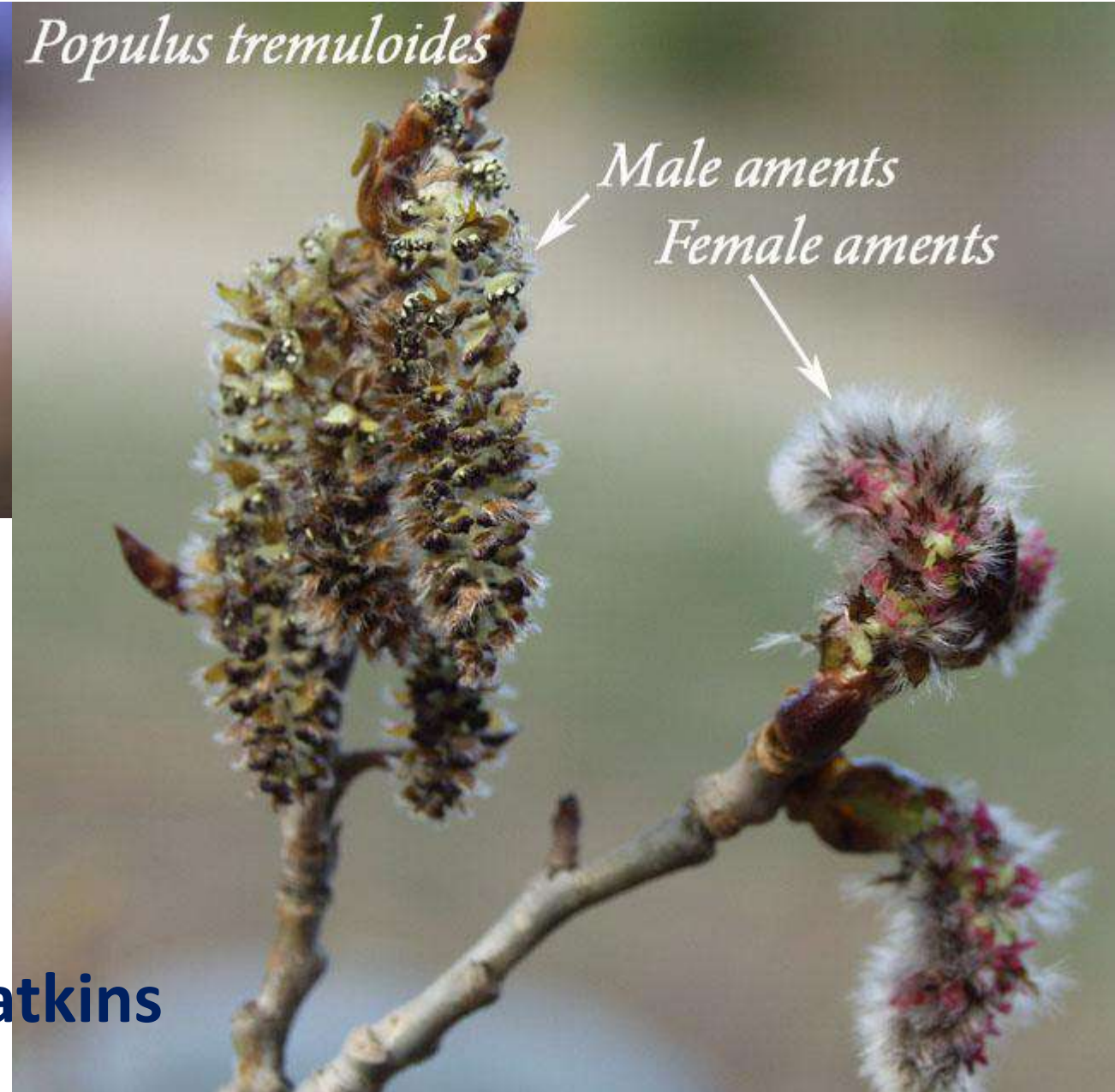
Trembling (Quaking) Aspen - male



Buds - winter



Late winter



Early spring - catkins



Ideal winter habitat would be a mix of aspen, birch and conifers such as white spruce and white cedar





**Grouse feeding aspen buds
and catkins**



Winter Snow Roosting





Lots of predators



Hunting

Ruffed Grouse – game bird in Ontario
- small game license required

Season – Sept 20th to Dec 31st

Daily limit – 5

Shotguns with light shot e.g. 7.5

Can be very challenging
in the south



Excellent Table Fare

www.wildliferecipes.net

Grouse Recipes - Wild Life Recipes



This pan-roasted grouse recipe uses a whole quartered ruffed grouse and some reduced game stock.

Tame Ruffed Grouse – What is with these birds?



“Genetic throwback” – pre-European settlement
“Hyper – territorial” – mostly males

Mr. P



Mr. P

**Bruce's Tame
Grouse**



Habitat Management for Ruffed Grouse

Early forest succession (e.g. poplar (aspen), birch, cherry, oaks, wild raisin, nannyberry, ..)

Optimum habitat should include brushy areas, young aspen stands, mature aspen stands with an understory of hazel or ironwood, and dense sapling aspen stands.

If aspen is absent – then oak, conifers, patches of shrubs and young trees

Trembling aspen is by far the most important tree for grouse.



Aspen Management

- Up to 116 species are found in an aspen dominated forest
- Age can make a difference
 - Saplings less than 10 years - chestnut sided warblers, golden winged warbler, woodcock, deer, cottontails, and are important for female grouse and her chicks
 - Pole sized aspen – 10 to 40 years - least flycatcher, yellow bellied sapsucker, red eyed vireo, woodpeckers, deer and grouse feed on the aspen buds, catkins and leaves
 - Mature aspen – 40 to 80 years - black bear, porcupine, pileated woodpecker, veery, flying squirrels and grouse feed on the buds, catkins and leaves



- Aspen reproduce both by seeds and root sprouts
- Few aspen seedlings survive in nature due to the short time a seed is viable
- Aspen doesn't often produce seed and, if it does, it's very light and fluffy, which makes it extremely difficult to collect and propagate



Aspen will grow readily from root cuttings



Root sprouting results in many genetically identical trees, in aggregate called a "clone".



If your woodlot has aspen ...

- Clearcut adjacent to the existing aspen – aspen regeneration needs full sunlight**
- Recommendation is for openings no less than 2.0 ha (5 ac), but work with what you have.**



Cut doesn't have to be square or round, work with the topography and existing forest, remember young aspen need full sunlight

To maximize regeneration cut in late fall or winter when trees have stored energy in their root systems



If your woodlot does not have aspen ...

- Aspen grows readily from root cuttings**
- In late winter or early spring, expose roots on mature trees and remove sections that are 1-3cm in diameter**
- Cut these into 30cm sections and store in bags, wrapped in moist paper or compost. Don't let the roots dry out**



Aspen suckers from horizontal roots near the surface

Plant the prepared root cuttings as soon as you can after collection in a container – keep moist

When the suckers are 5-7cm tall, cut them off the roots with a sharp knife, place in compost and keep moist – roots produced in ~ 4 wks

Can plant in autumn



Other management considerations ...

Plant mast producing trees and shrubs. Some can be planted in small openings in the forest.

Clear around existing mast producing trees to remove competition, promote fruit production and allow sunlight for regeneration.

Small openings and clearings can be achieved when cutting firewood

Plant conifers (cedar and spruce) near food producing trees

Create drumming logs in areas with moderate cover

Eliminate invasive species – e.g. buckthorn

Ruffed Grouse thrive in a dynamic forest landscape subject to periodic disturbance.

Good ruffed grouse habitat provides a combination of food and cover within a small area.



"Everybody knows that the autumn landscape in the northwoods is the land, plus a red maple, plus a ruffed grouse. In terms of conventional physics, the grouse represents only a millionth of either the mass or the energy of an acre. Yet subtract the grouse and the whole thing is dead."

Aldo Leopold *(Sand County Almanac)*

The End

