

# Ontario Forest Birds Workshop



When: April 2009

Where: Sault Ste. Marie

Who: 1. Funding support: OMNR, SFMN, Forest Coop

2. Org. Committee: Ian Thompson, Jim Baker,  
Bob Watt, Kandyd Szuba, Marg Donnelly,  
Rob Rempel, Derrick Romain, Dianne Miller

Local logistical support: CFS (Guy Smith, Jason Langis,  
and Stan Phippen)

Registration: SFMN



## Workshop objectives

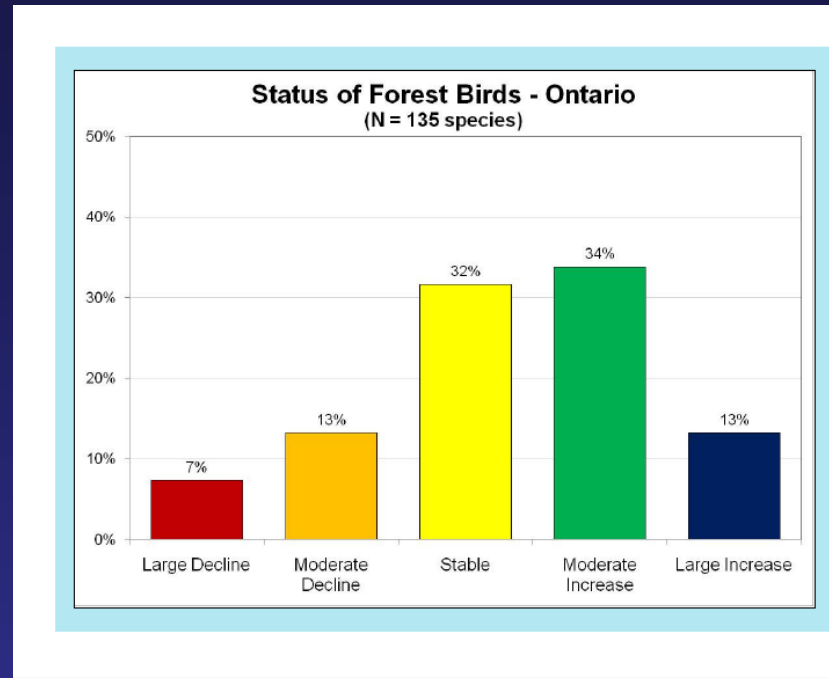
- What do we know about the status and distribution of birds that might be affected by forest management?
- What do we know about effects of forest management on forest and forest-wetland birds?
- At what scales are bird responses measurable or detectable?
- Do we need to direct forest management actions towards any individual species?
- Can we identify future research needs, information needs, tools, emerging issues, etc. to improve management of habitats for forest birds?

# Attendance, presentations

- 22 papers presented
- 2 workshops and 2 panel discussions held over 3 days
- ca. 100 attendees (limited to 100): from industry, OMNR, university, BSC, CWS, CFS plus 5 invited speakers
- results published in: Forestry Chronicle Vol. 85 (2)



# Blancher et al. - bird status



- 20 year trend between atlases
- most species show no change or increase
- mostly insectivores showing decline
- causes of declines varied: wintering grounds, climate, insect trends (all aerial insectivores declined), FM unlikely cause from these data
- evidence has a high degree of uncertainty, especially in boreal

# Naylor - Change in buffer guide direction

Size of buffers (radius) within which high impact operations are restricted in the old and new direction.

Buffer radius (m)	Old Direction	New Direction
Great blue heron	300 / 1000	300
Osprey	300 / 800	300
Bald eagle	400 to 800	400
Barred owl	150	200
Northern goshawk	150	200
Red-shouldered hawk	150	200
Broad-winged hawk	150	100
Great horned owl	150	100
Red-tailed hawk	150	100
Common raven	150	50
Merlin	150	50
Sharp-shinned hawk	150	50

## Drapeau et al. - cavity nesting

- different cavity nesters have different preferences for snags by size class, species of tree, live or dead, and decay class
- remnant stands had fewer large snags and fewer snags overall compared to natural forests
- conservation of these species requires careful management in space and time to ensure continuous supply of declining and dead trees



## Thompson et al - effects of post-harvest silviculture

- convergence of communities appears likely between managed and unmanaged stands
- planting and tending reduced return time for some species
- 6 OG species already attained densities similar to natural OG forests in 50-year old treated forests
- some concern about boreal chickadee, brown creeper, and blackburnian warbler - but, may be a time factor

## **Nudds et al. – structure in forest bird communities**

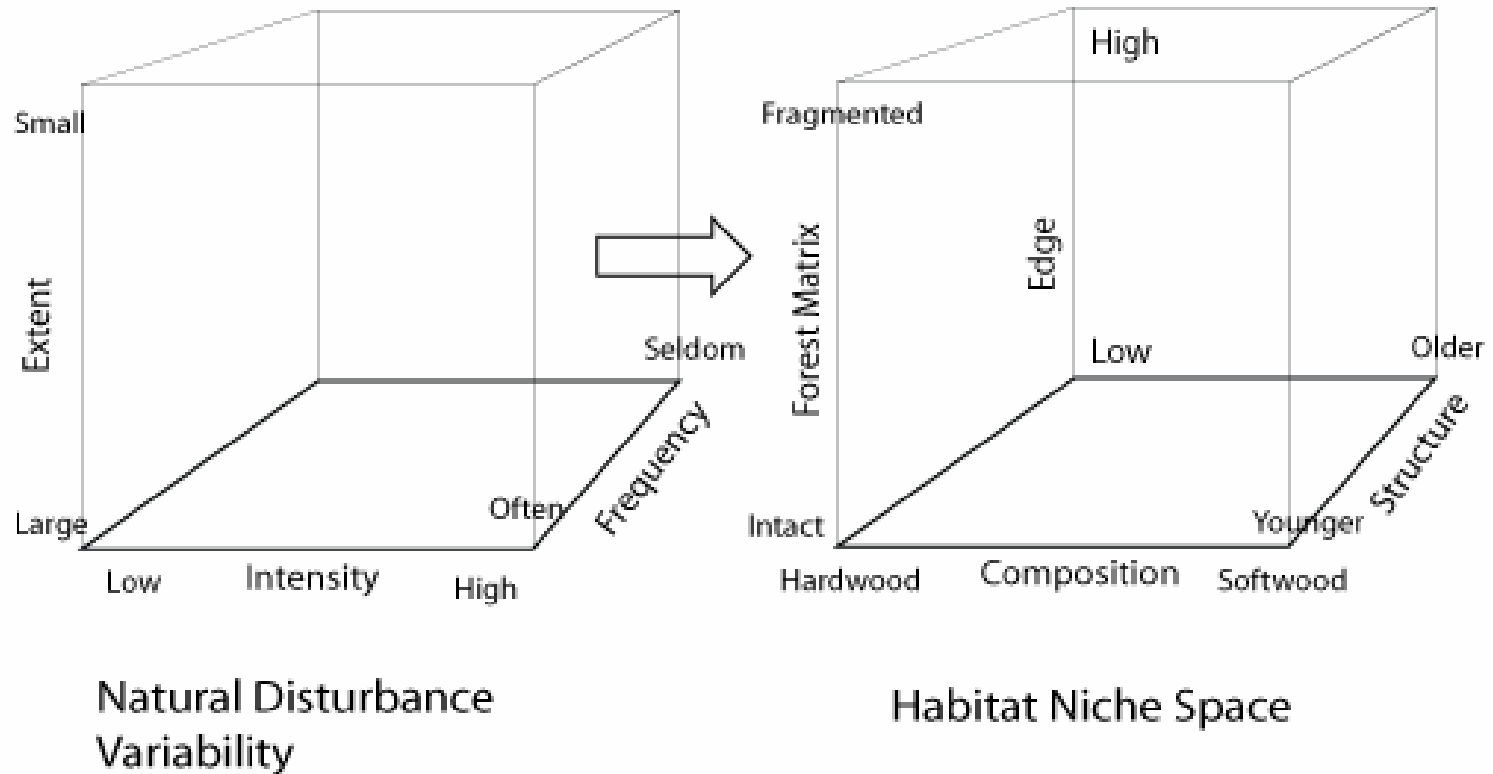
- competition seems to be a major process structuring bird communities in boreal forests
- limited regional species pool results in about 20+ species in a given stand
- management seems to have limited effect on the process

## Holmes et al. - Ontario habitat matrix

- several species not well predicted by the habitat matrix model
- model validation is important
- especially need to model preferred and not just 'used' habitats



# Rempel et al. - birds as indicators of forest change



- need a range of habitat conditions to support birds, including clustered edge habitats and large expanses or more or less even-aged forests
- find indicators at the corners of the box

## **Venier et al., and Szuba et al. - budworm effects on bird populations**

- strong positive effects on 3 key species: Tennessee warbler, Cape May warbler, and bay-breasted warbler
- more general habitat selection in absence of budworm
- Canada warbler a species of concern - but effect may be periodic depending on budworm

## Hannon and Swift - thresholds

- main conclusion is that thresholds are species and ecosystem dependent
- thresholds differed between regions for the same species and by the scale of observation selected
- fitness thresholds are higher than abundance thresholds
- some sensitive species for which habitat targets could be set

## **Nol et al., Burke et al. - GLSL species**

- highly variable requirements by species - need highly heterogeneous habitats across a landscape
- nesting and fledging habitat are different
- species-specific responses to silviculture, e.g., selection harvesting highly negative effects on wood thrush
- density is not always an indicators of quality - large effects seen during fledging
- landscape scale thinking is important

# General outcomes from the workshop

- some species not showing declines in Atlas data are otherwise supported by research data suggesting declines; this needs to be reconciled
- generally seems to be little lasting effect of FM on boreal birds, but some species require careful management
- difficult to separate causes for declines between changes on breeding grounds vs. on wintering grounds
- Atlas data may be too coarse to detect fine-scale declines  
- so care in interpretation is required
- predictive models - the basis of a monitoring program
- continued monitoring is essential - effects and effectiveness