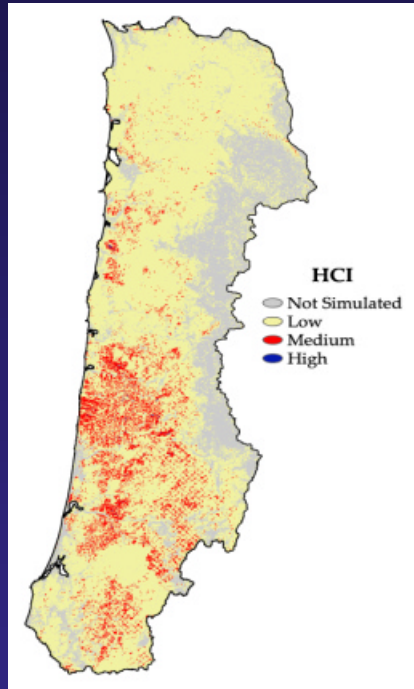


# Current Wildlife Habitat Patterns



Bill McComb, Mike McGrath, Tom Spies,  
Dave Vesely

# *Objectives*

**Assess wildlife habitat availability from two perspectives:**

- ◆ Structural types that provide general information about numbers of species and groups of species that might be expected in these different types, and
- ◆ Focal species approach using habitat capability models.

# Coast Range Forest Wildlife Diversity: 193 species



Amphibians  
16 spp.



Birds  
110 spp.



Mammals  
60 spp.



Reptiles  
7 spp.



# “Hidden” Diversity: 100’s-1000’s Species



Mosses



Fungi



Insects



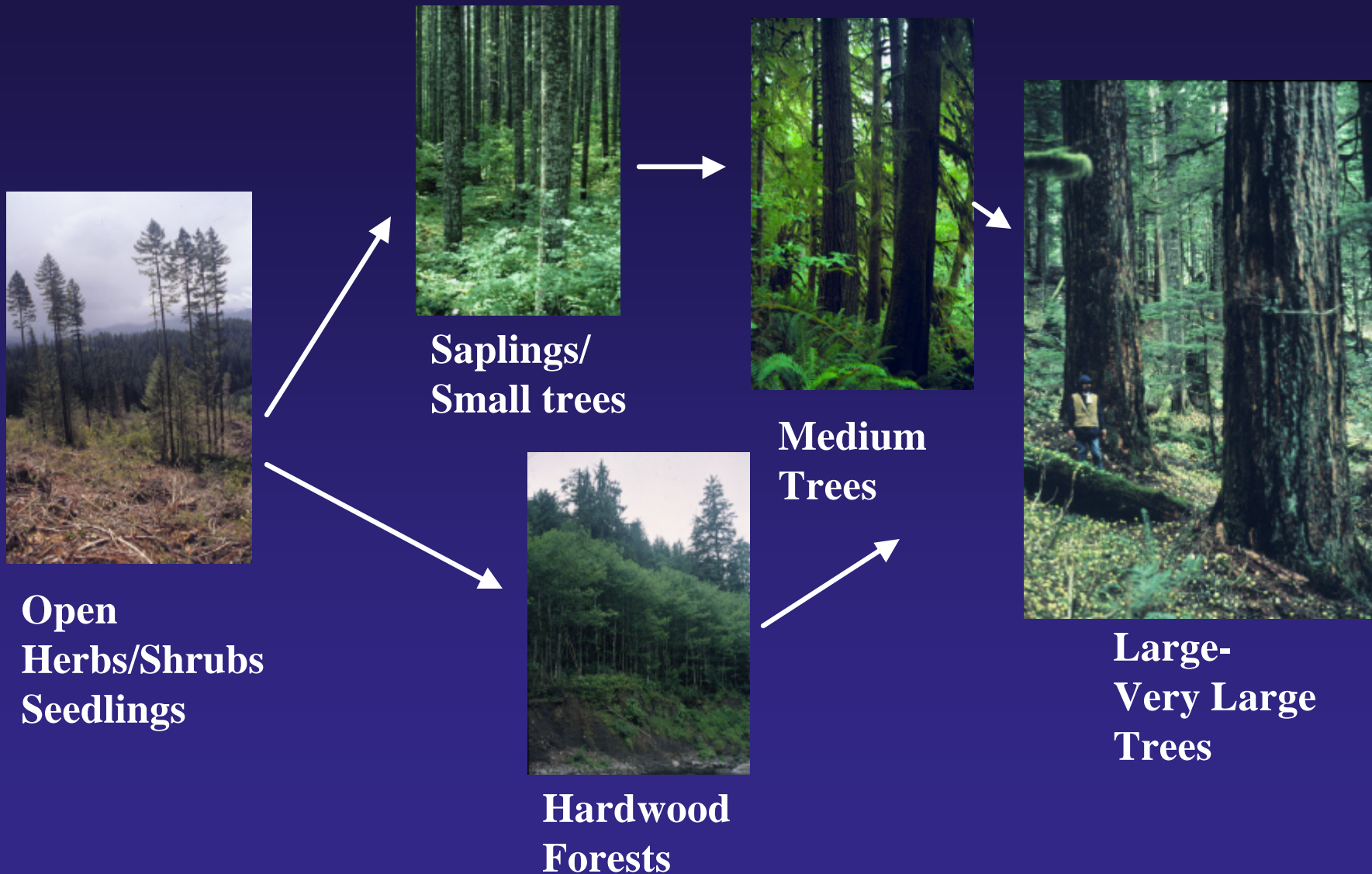
Liverworts



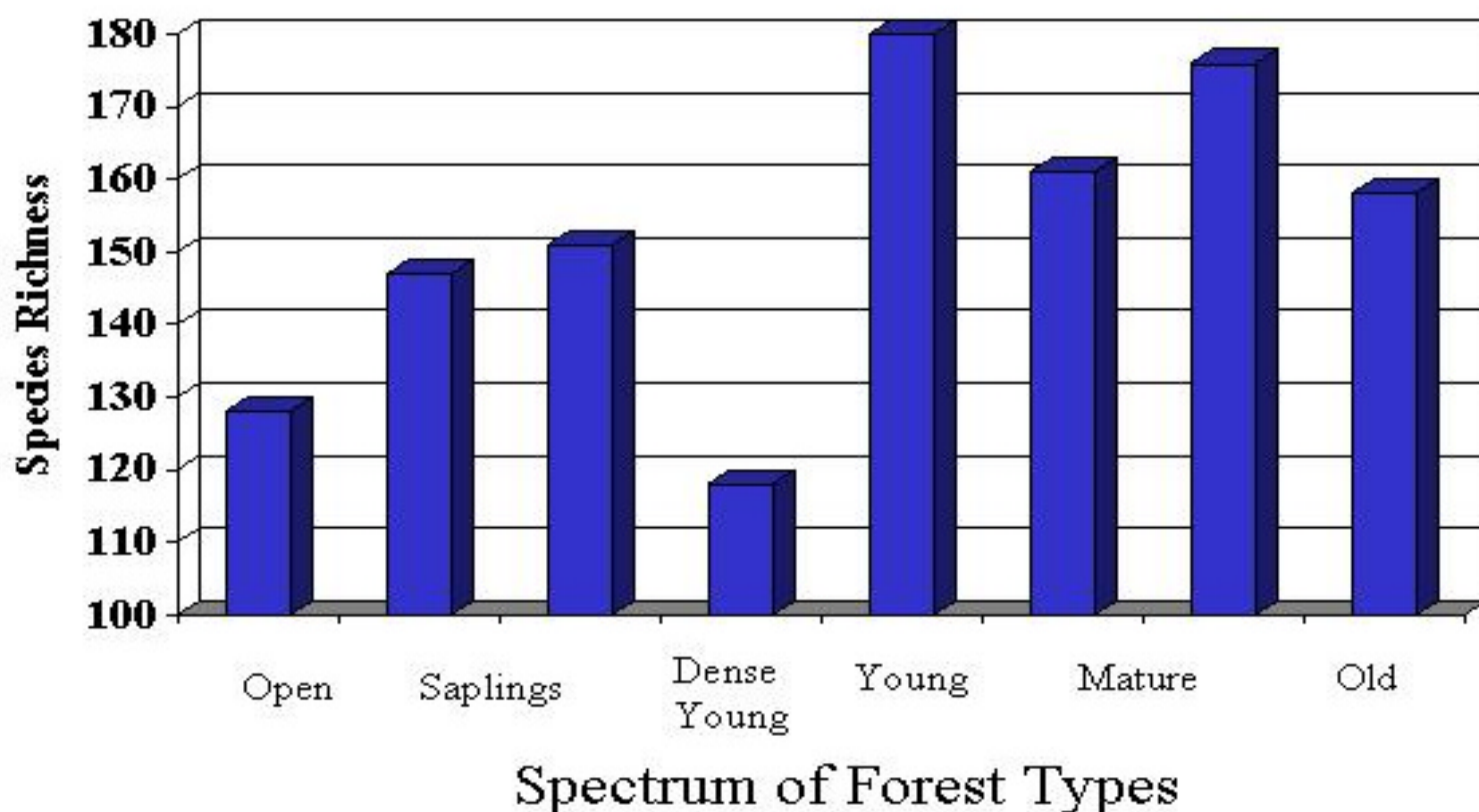
Lichens



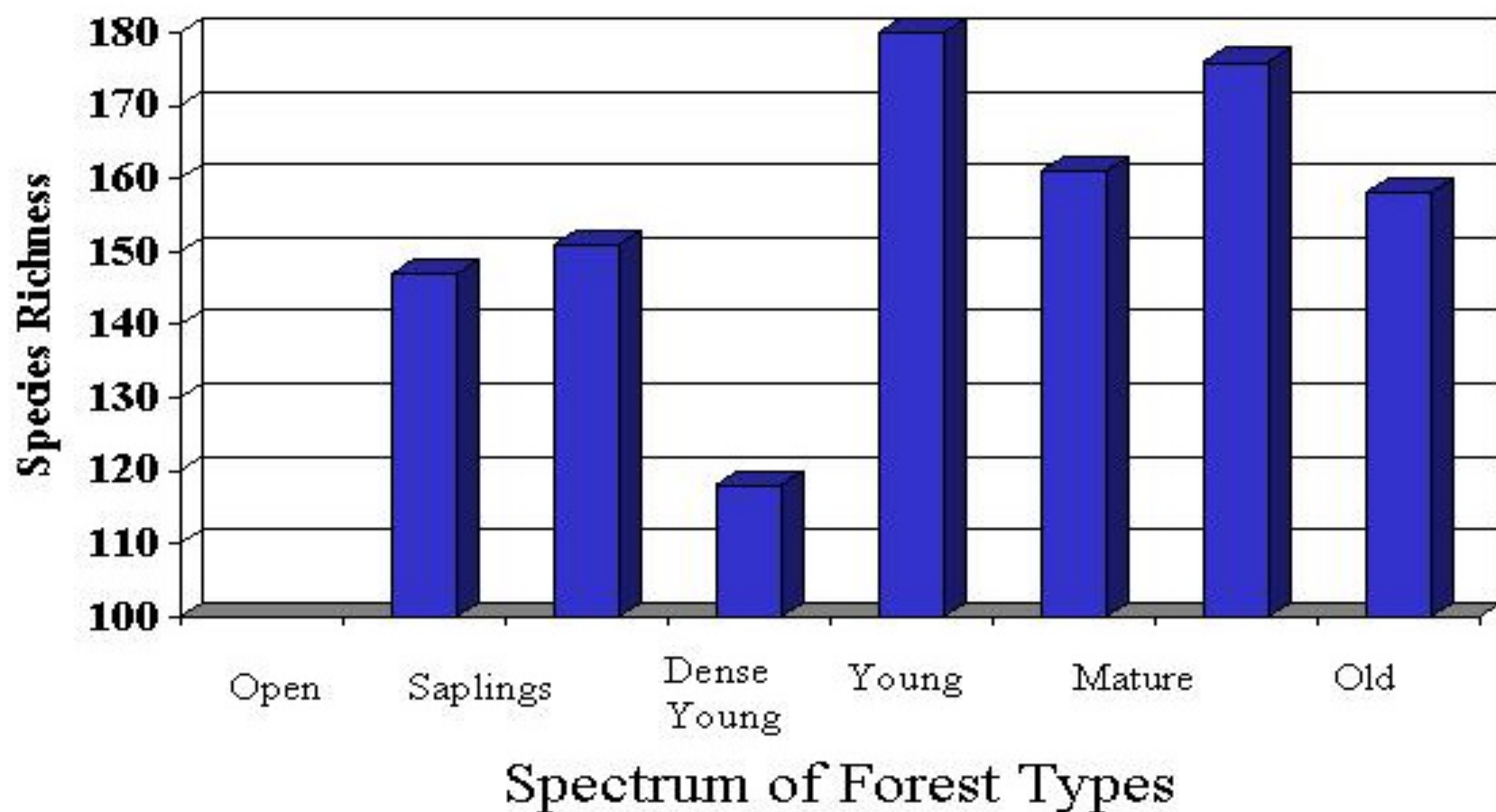
# Structural Types for Wildlife Community Analysis



# Vertebrate Species Richness by Forest Development Types



# Major Types (>5%) found on Public Lands

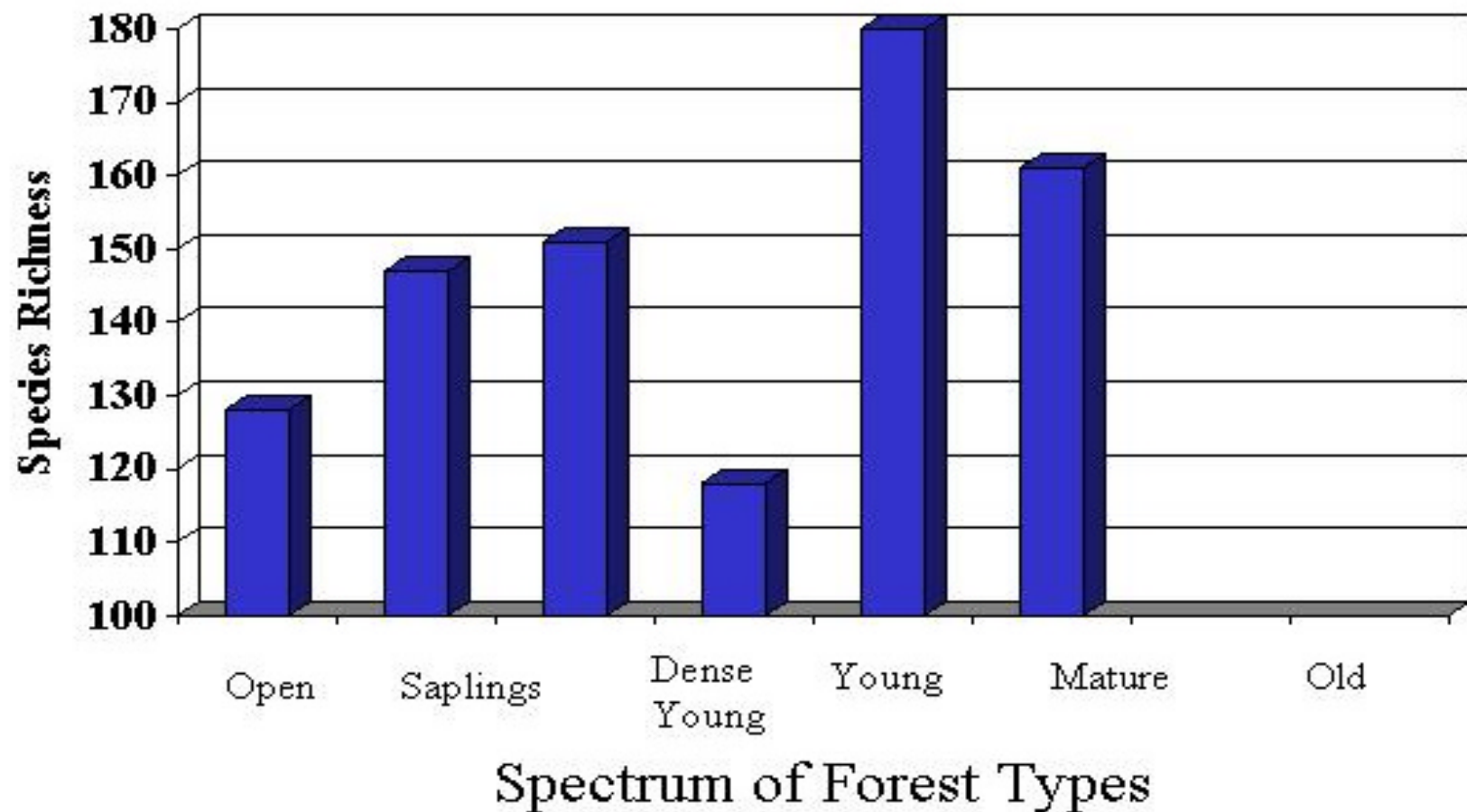








# Major Types (>5%) Found on Private Lands





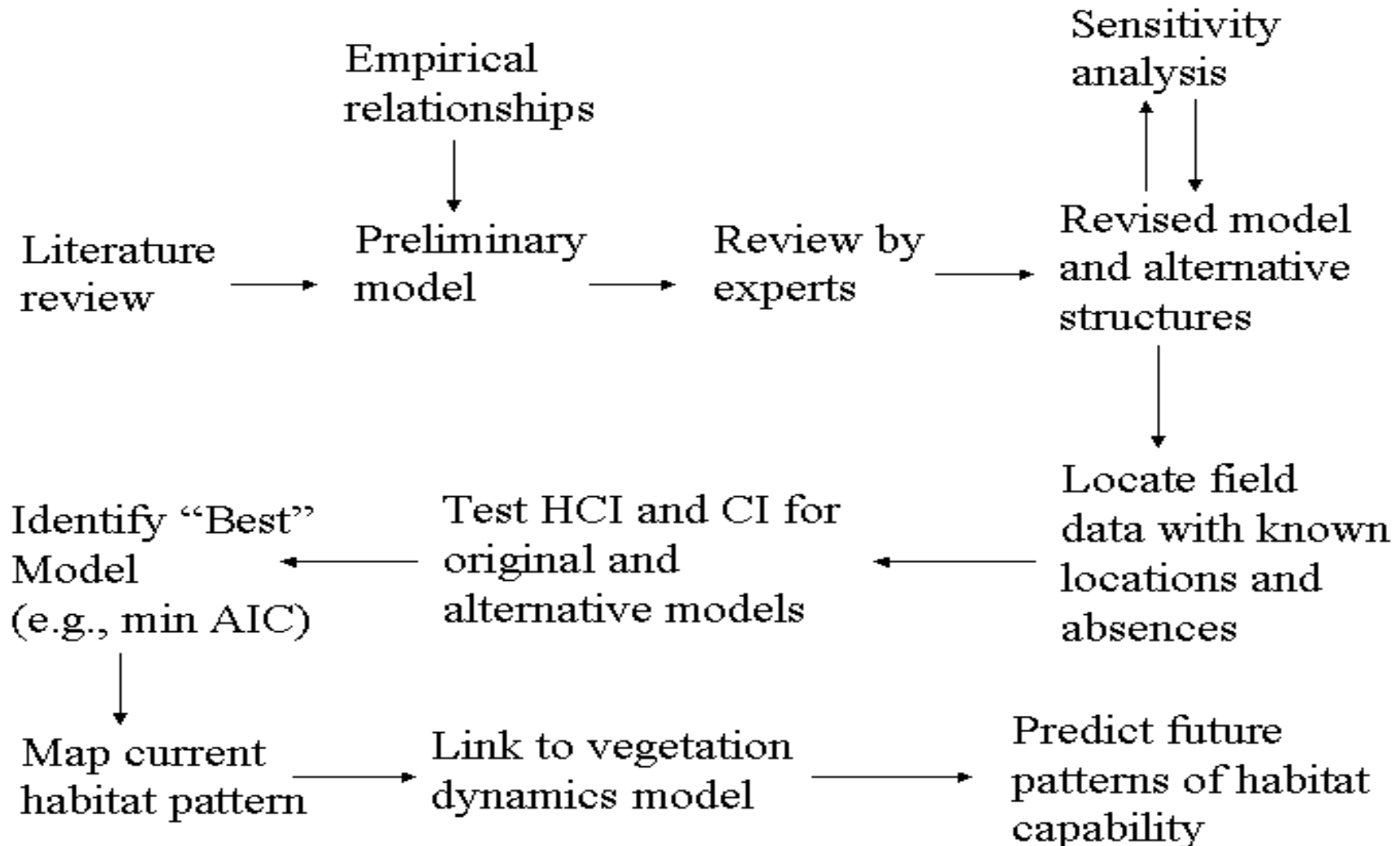






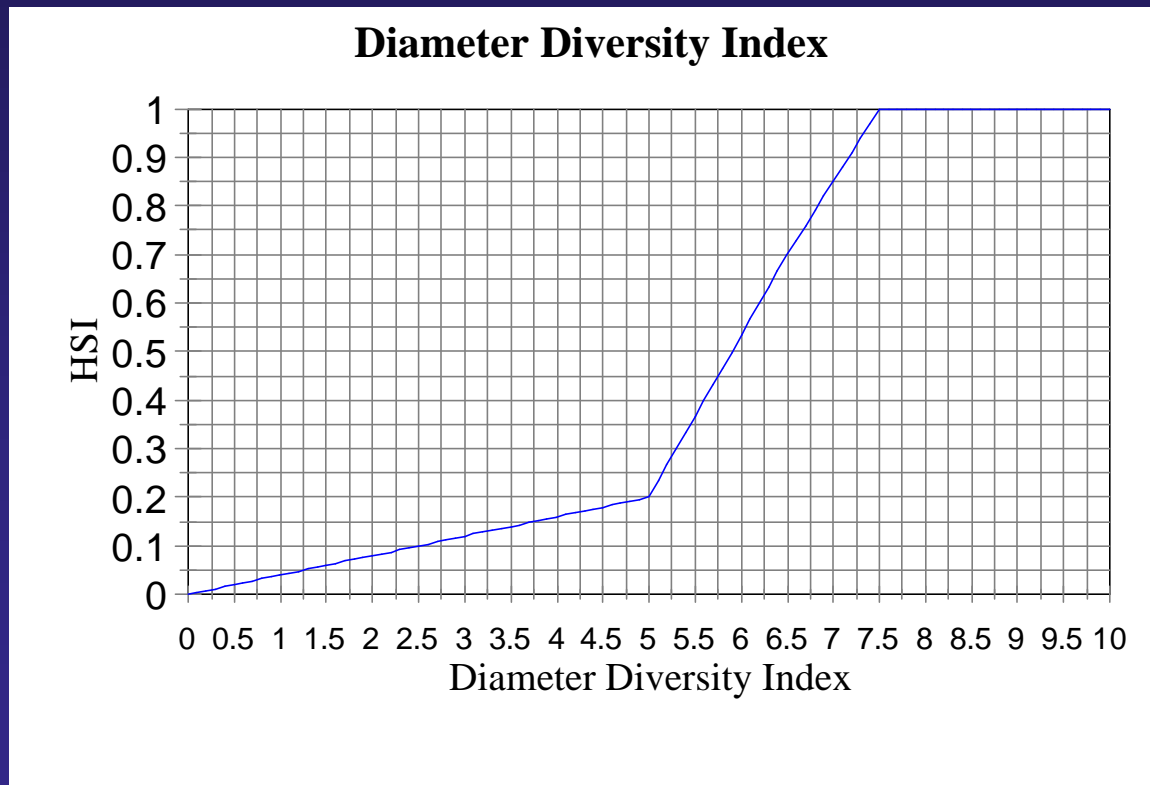


# CLAMS Habitat Model Development



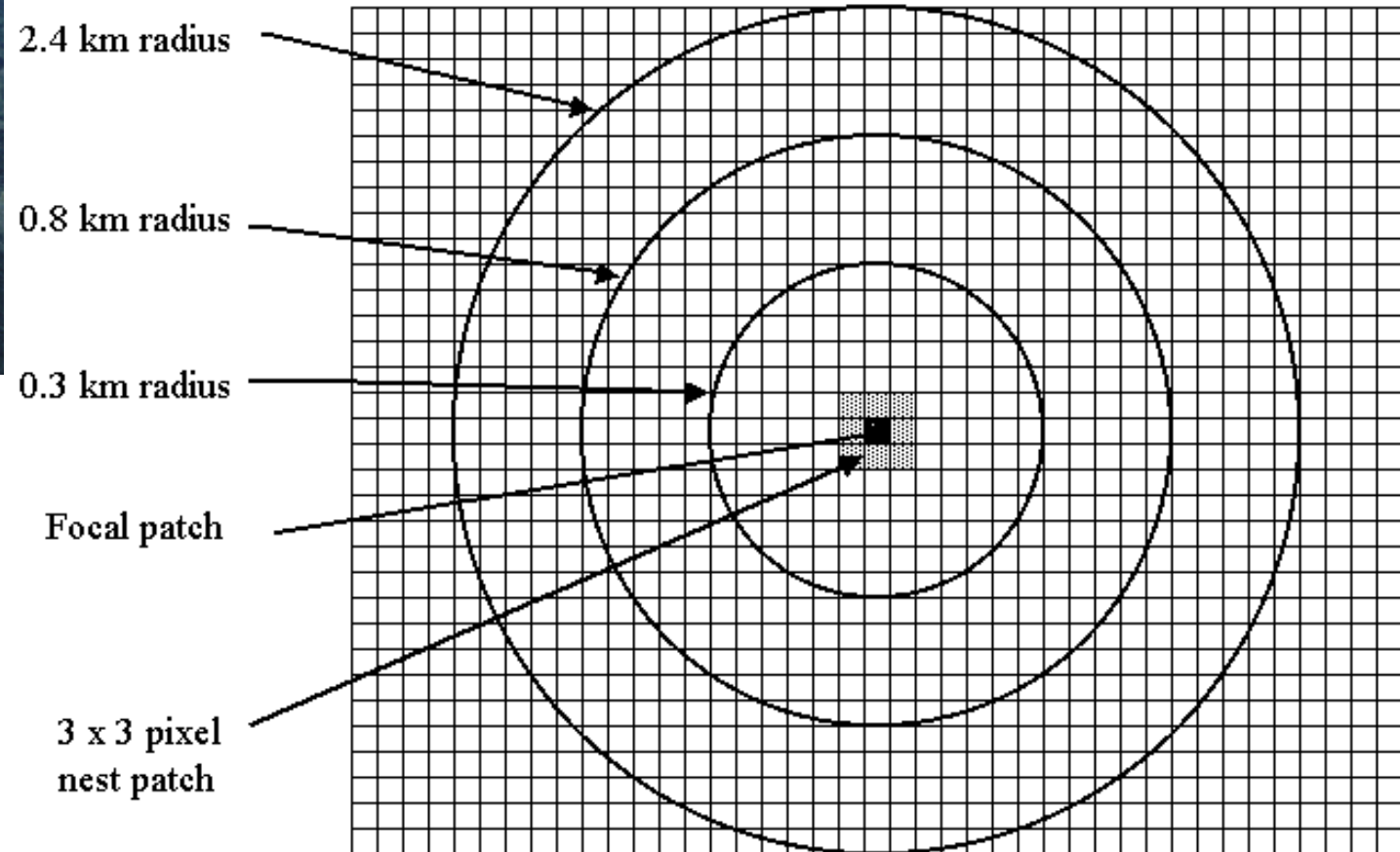
# Spotted Owl

One of several habitat factors used to assess nesting habitat quality applied to each focal pixel:



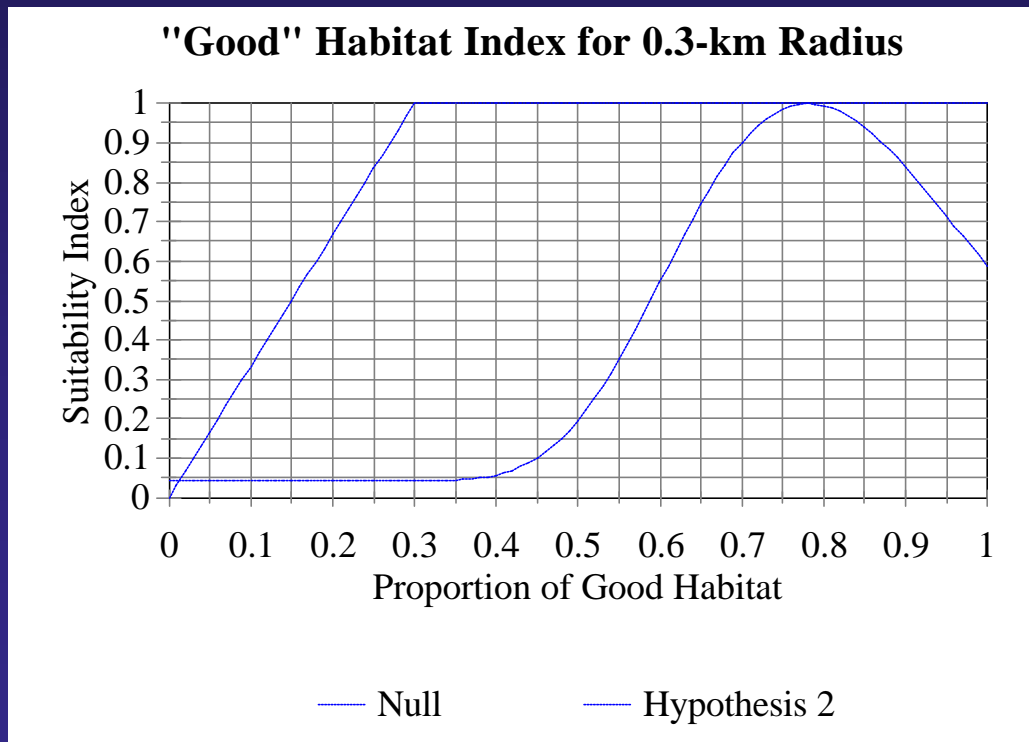


# Example of Scales of Habitat Quality Assessment for the Northern Spotted Owl

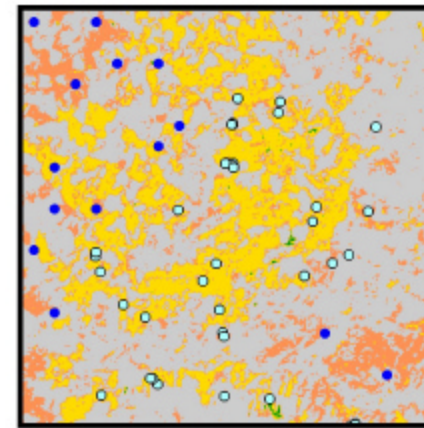
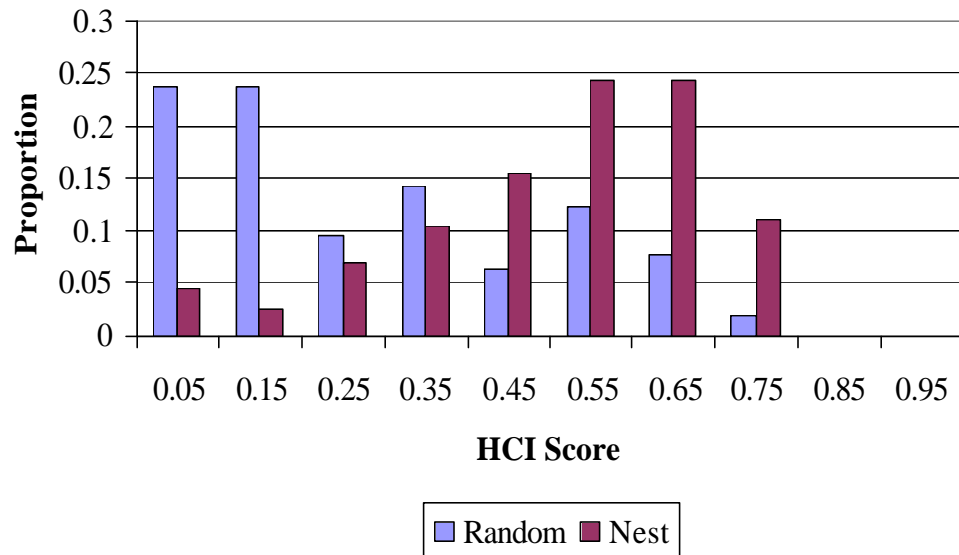


# Spotted Owl

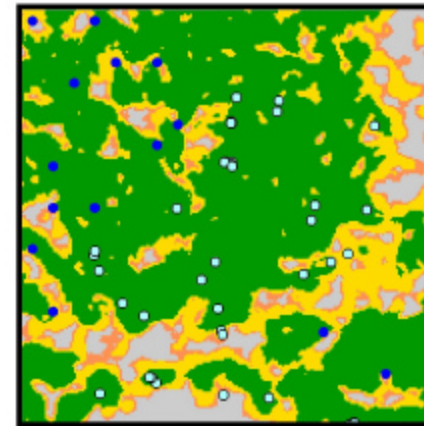
- ◆ One of several indicators of foraging habitat quality applied to areas around each focal pixel



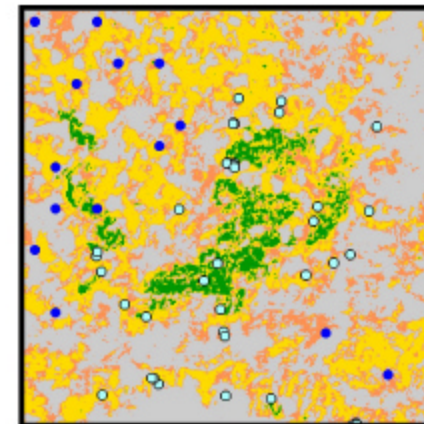
# Northern Spotted Owl Habitat Capability Index



(a.)

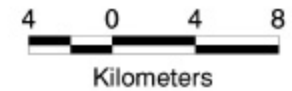


(b.)

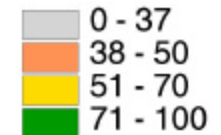


(c.)

NCI (a.), LCI (b.), and overall HCI (c.) scores for a representative area of the Oregon Coast Range showing both Spotted Owl nest sites (open circles) and randomly selected sites (solid circles)

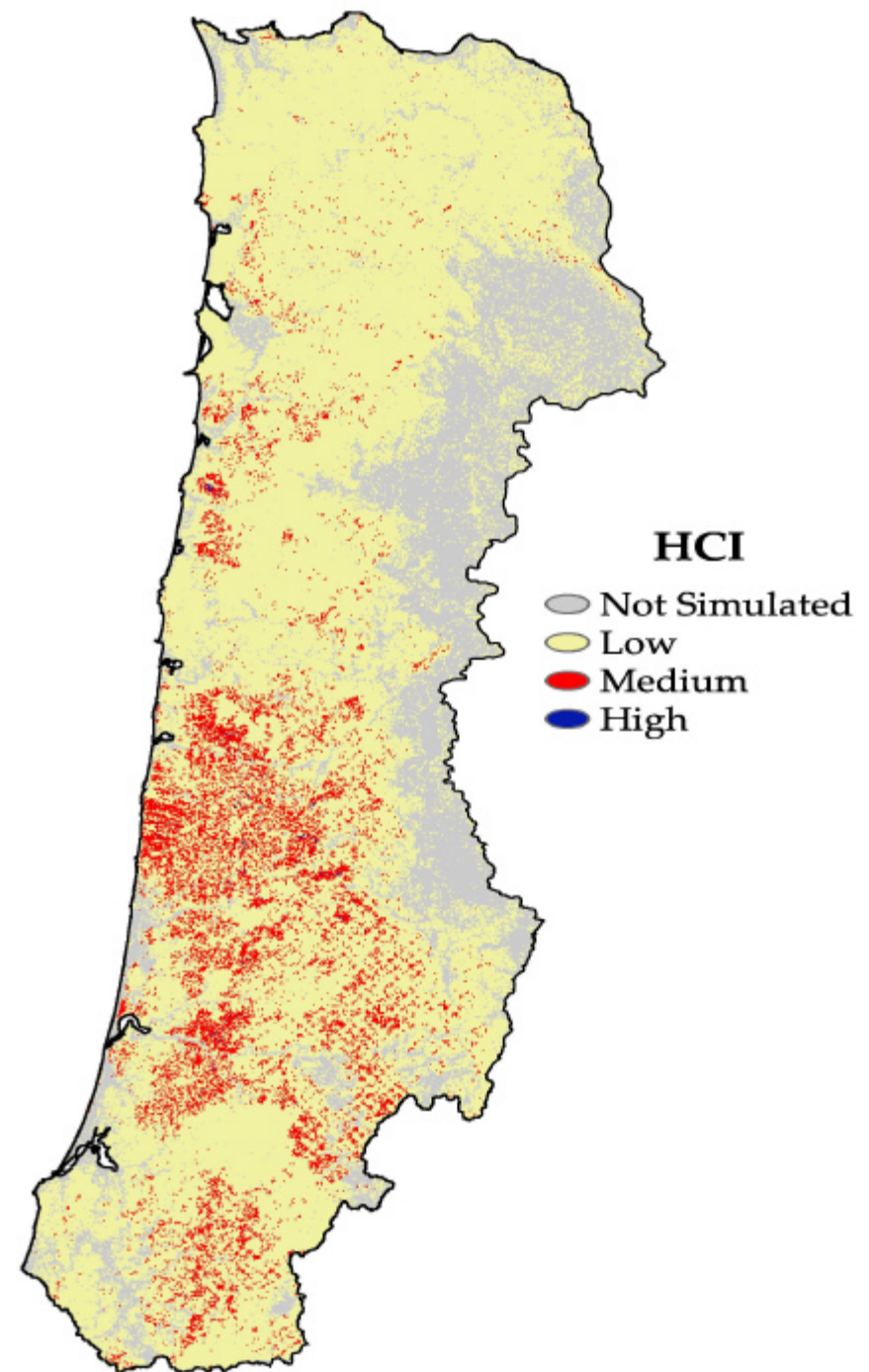


## Legend





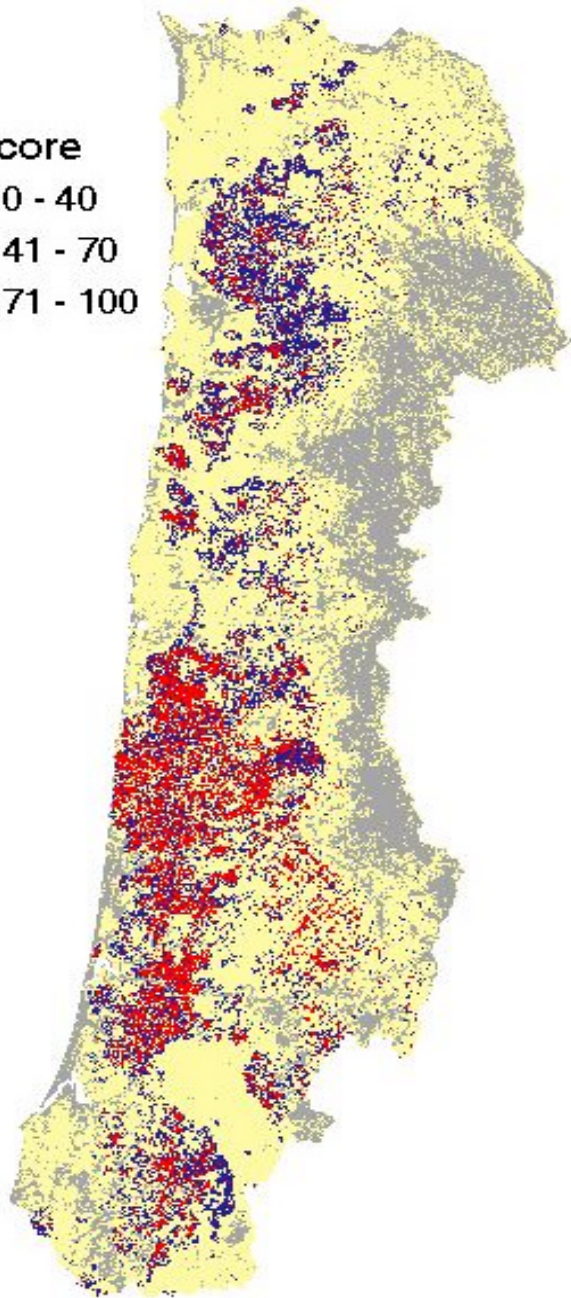
# Northern Spotted Owl Habitat Capability Index





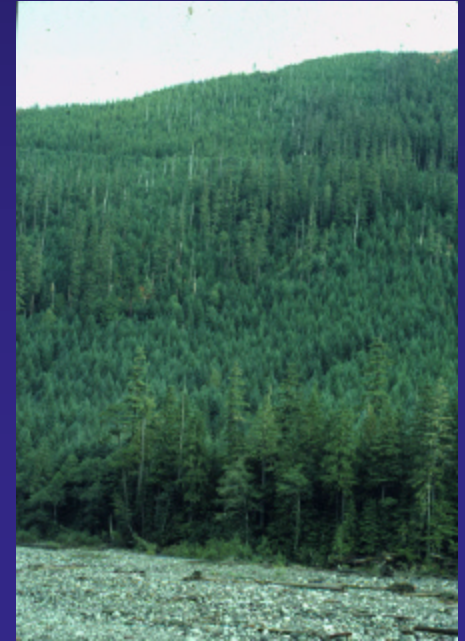
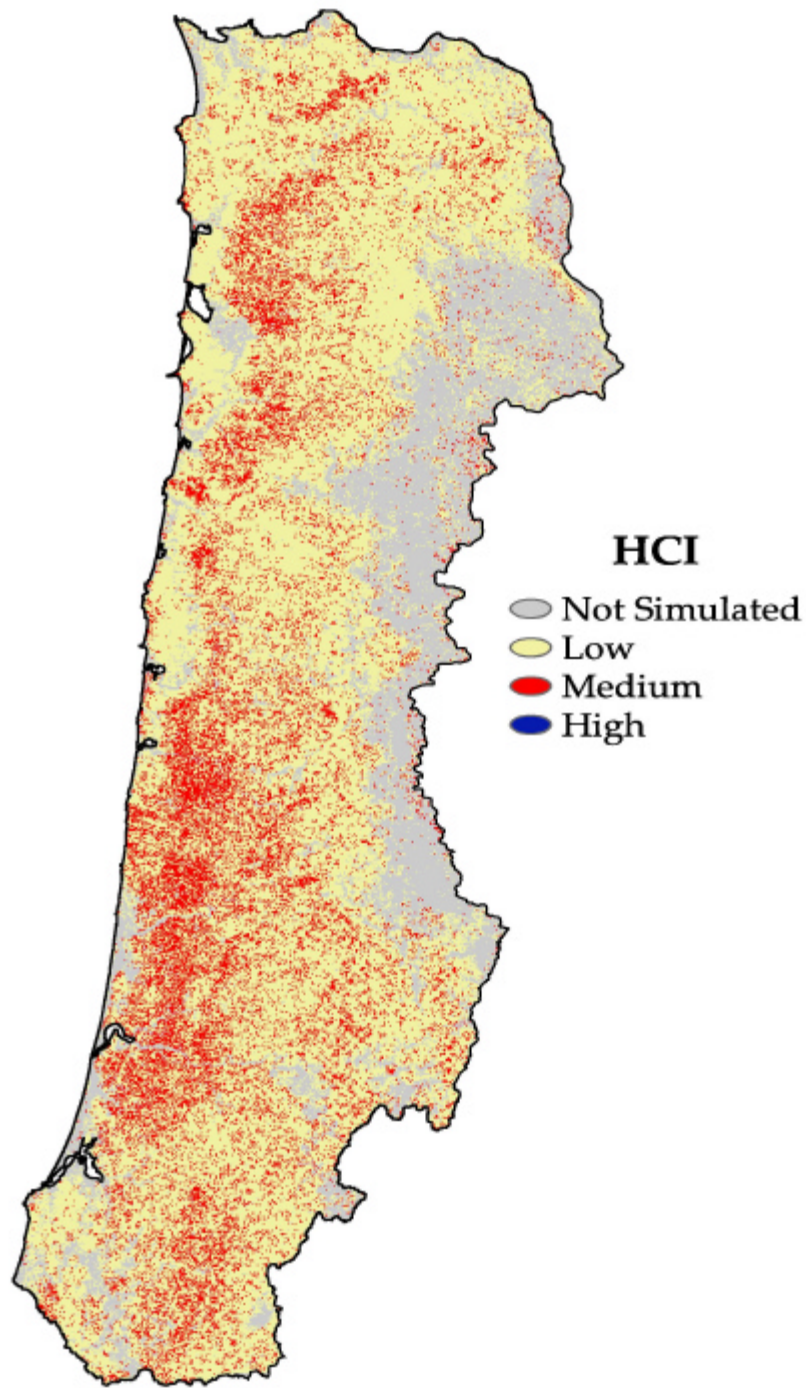
# Pileated Woodpecker

HCI Score



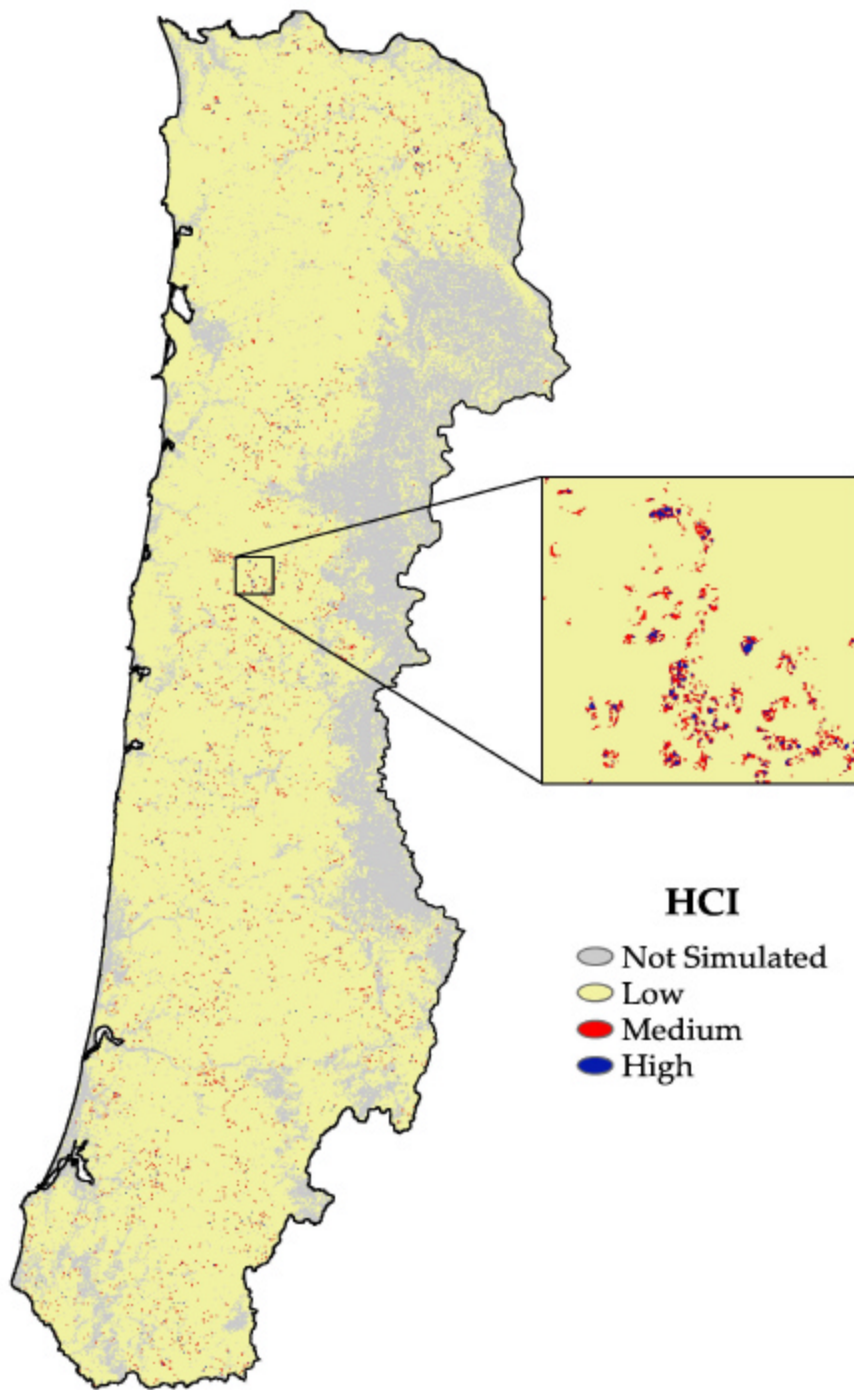


# Olive-sided Flycatcher

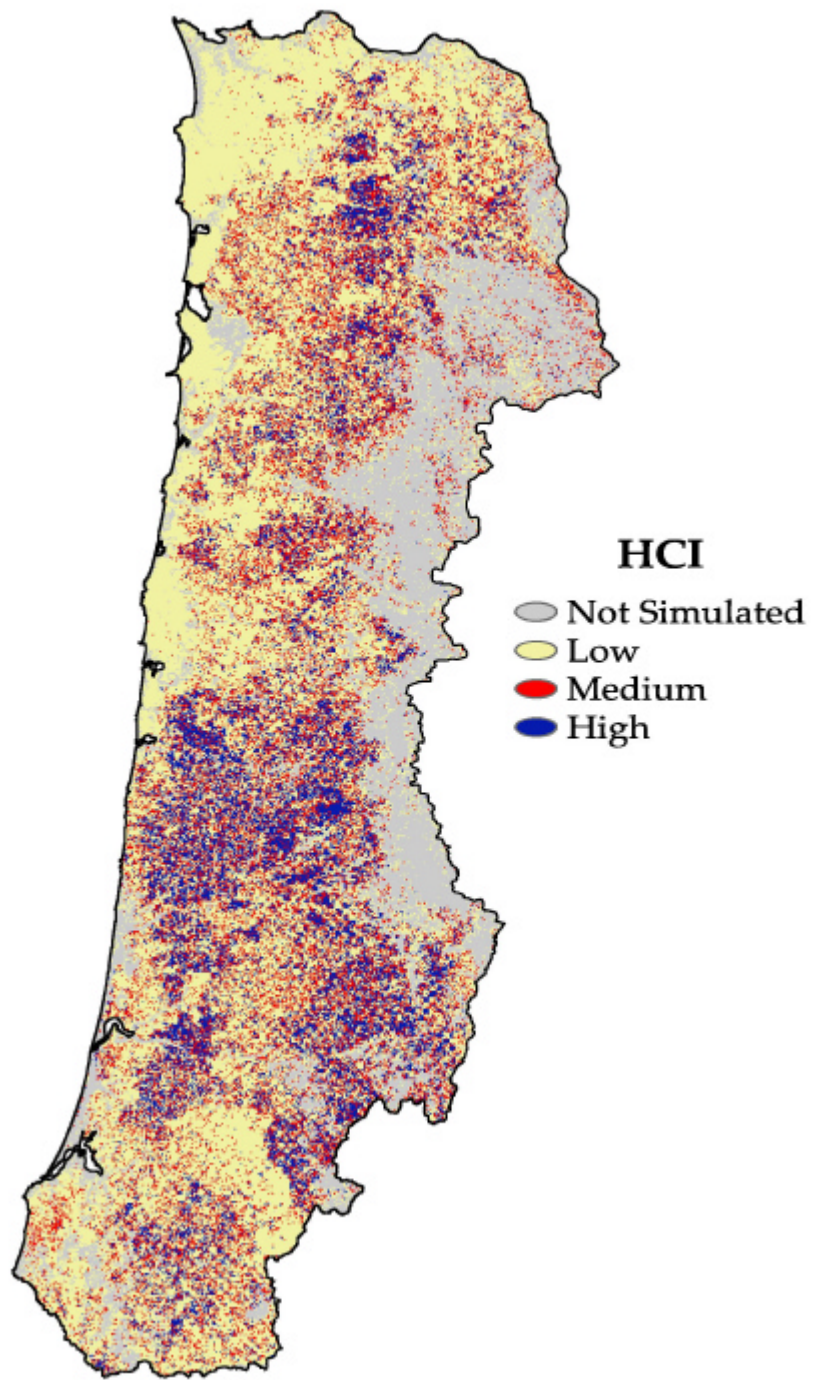




# Western Bluebird



# Red Tree Vole





# Currently Available Models

- ◆ Northern Spotted owl (published)
- ◆ Marbled Murrelet
- ◆ Western Bluebird
- ◆ Pileated Woodpecker
- ◆ Olive-sided flycatcher
- ◆ Red tree vole

Others will be completed in the near future, e.g., elk



# Characteristics of the Models

- ◆ Multiple spatial scales are represented
- ◆ Habitat quality is indexed between 0-1
- ◆ Assess the capability of an area to provide habitat for a species over space and time
- ◆ Could provide the basis for assessing the number of potential home ranges over space and time
- ◆ Can provide the basis for estimate population viability if data are sufficient

# CONCLUSIONS

- ◆ Structural types may provide a useful framework for understanding current vegetative conditions (not necessarily habitat) relative to the historic range of variability and provide the basis for a coarse filter assessment
- ◆ Fine filter analyses using habitat elements to describe habitat for focal species may more accurately reflect relative habitat quality in complex landscapes

# CONCLUSIONS

- ◆ All ownerships are contributing to habitat quality for some species; many species are widely distributed across the Coast Range
- ◆ Ownership pattern and past land use is reflected in patterns of habitat quality for the focal species that we examined



QUESTIONS?

