

Wildlife Workshop



PETERSON FIELD GUIDES®

Birds

of Eastern and Central North America

Fifth Edition

Completely revised with range maps throughout



PETERSON FIELD GUIDES®

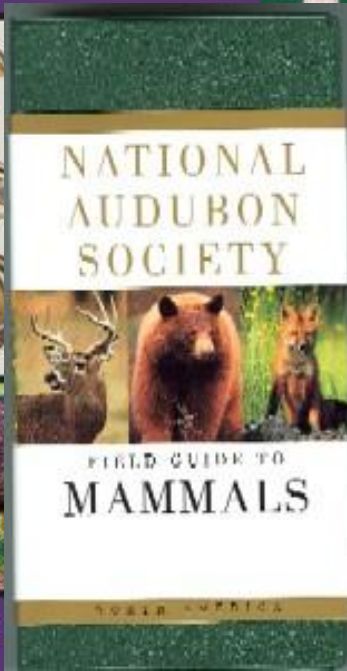
Mammals

of North America

Fourth Edition



Fiona



NATIONAL GEOGRAPHIC

Field Guide to the

Birds

of North America



PETERSON FIELD GUIDES

Reptiles and Amphibians

Eastern/Central North America

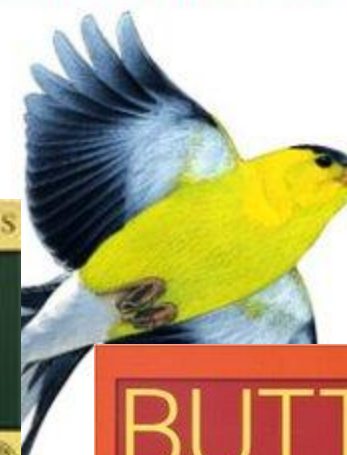


Roger Conant/Joseph

The SIBLEY

FIELD GUIDE TO BIRDS

of Eastern North America



PETERSON FIELD G

Animal Tracks



BUTTERFLY BOOK

PETERSON FIELD GUIDES

Freshwater Fishes



STOKES



nals

Using Field Guide Keys

Key to the families of Salamandroidea

1a) Adults with gills	2
1b) Adults without gills	3
2a) Adults with four toes on hind foot	Proteidae (page 19)
2b) Adults with five toes on hind foot	Ambystomatidae (in part)(page 8)
3a) Adults with gill slit(s), limbs reduced	Amphiumidae (page 7)
3b) Adults may or may not have gill slits, limbs not reduced	4
4a) Parasphenoid teeth (see Figure 1) present	5
4b) Parasphenoid teeth absent	6

Figure 1. Presence (a & b) and absence (c) of parasphenoid teeth.

5a) Nasolabial grooves (see Figure 2) present; costal grooves well developed.	Plethodontidae (page 11)
5b) Nasolabial grooves absent; costal grooves may or may not be well developed	Salamandridae (page 20)

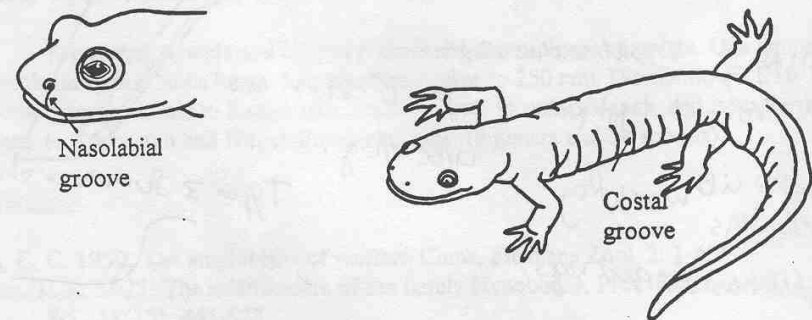
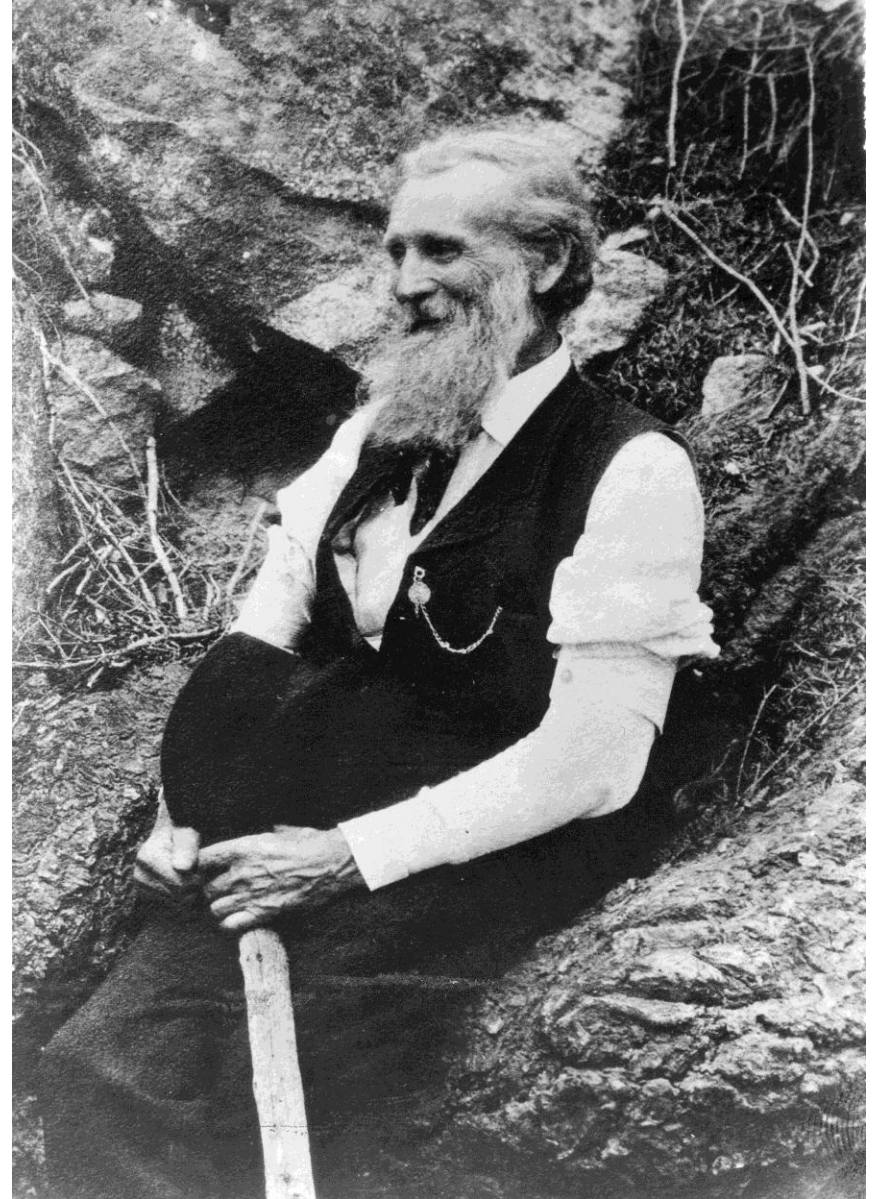


Figure 2. Nasolabial groove and costal groove

6a) Costal grooves indistinct; dorsum brown with black markings	Dicamptodontidae (page 10)
6b) Costal grooves distinct dorsum not brown with black markings	Ambystomatidae (in part)(page 8)

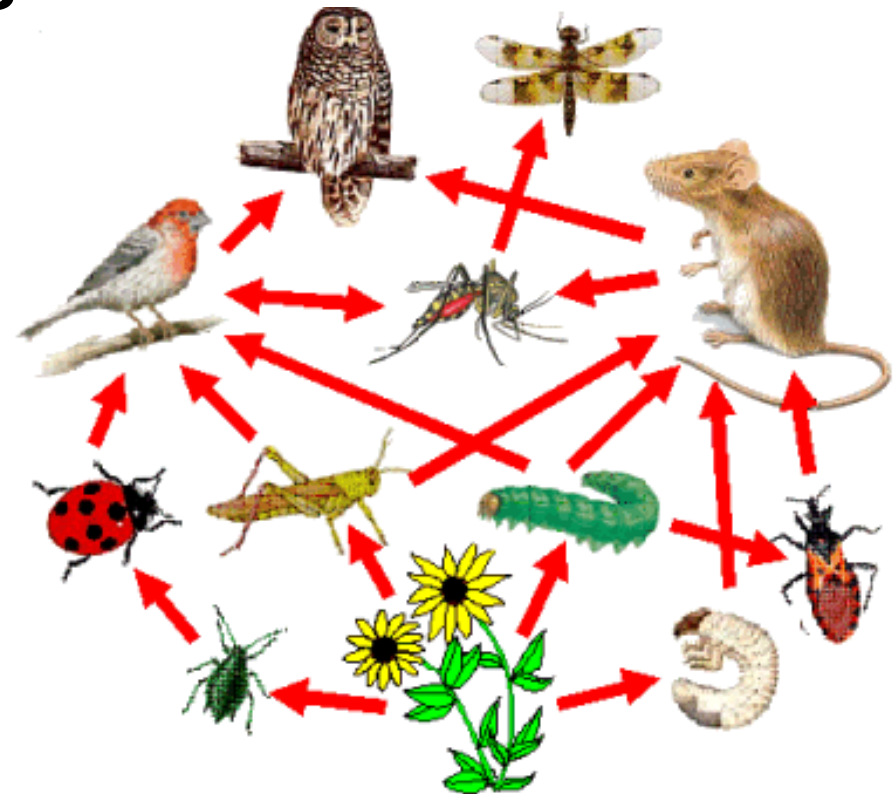
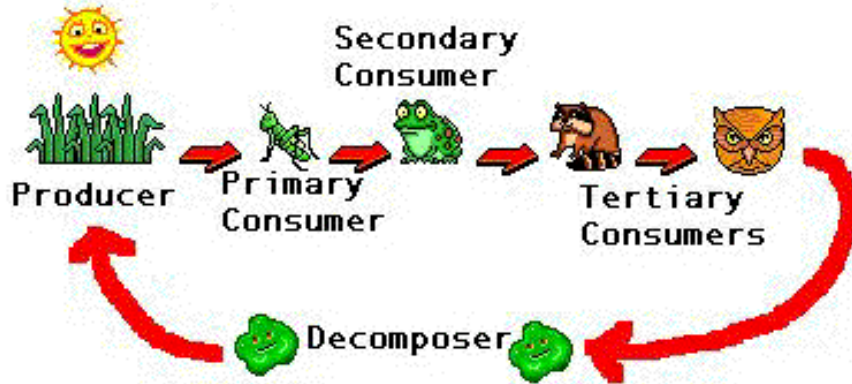
**“When we try
to pick out
anything by
itself, we find it
hitched to
everything else
in the
Universe.”**



Food Chains

VS

Food Webs



Site Specific Examples for Best Marks

Competition / Niche

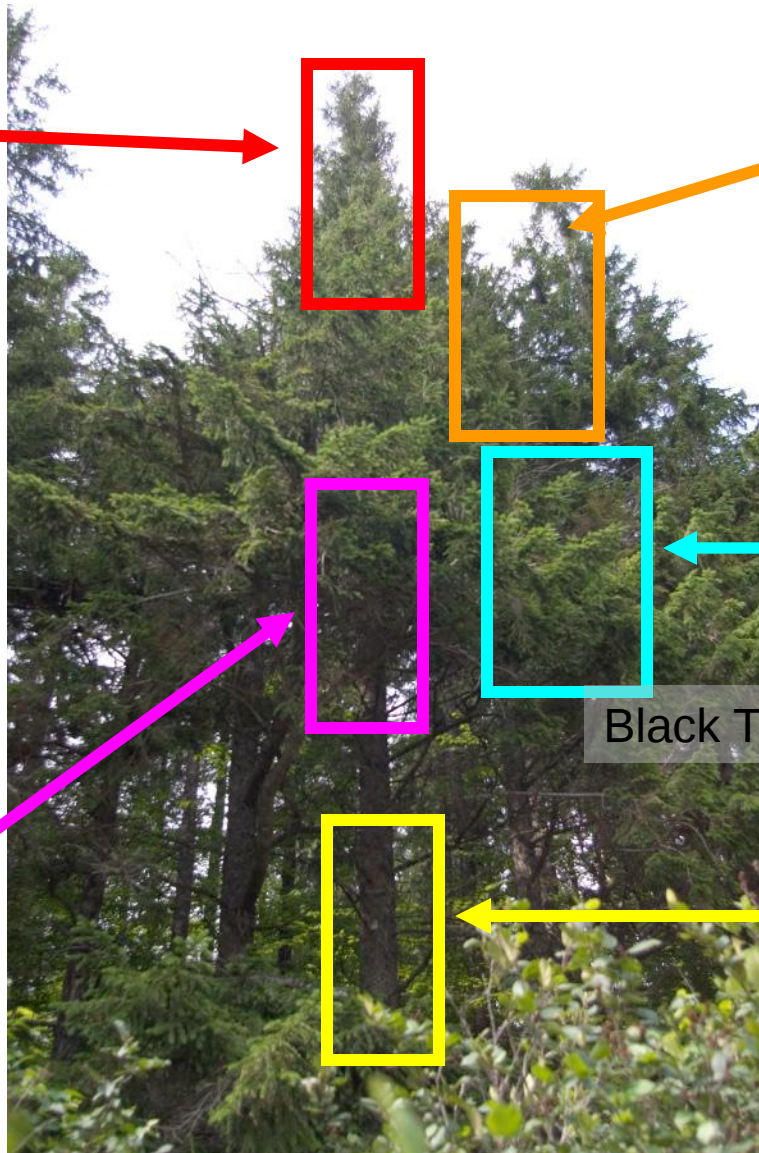


An **ecological niche** is the role and position a species has in its environment; how it meets its needs for food and shelter, how it survives, and how it reproduces.





Bay Breasted Warbler



Blackburnian Warbler



Black Throated Green Warbler



Cape May Warbler



Yellow Rumped Warbler

Habitat Generalists vs Specialists

Development Stage	Species and Region ¹	Forest Ecosystem																								Special-Value Habitats		Preferred Habitat Features			
		Aspen-Birch				Northern Hardwoods				Oak-Pine				Hemlock				Spruce-Fir				N. White Cedar				Riparian and Wetland	Vernal Pool	Extensive Forest	Snags, Cavity Trees, or Deadwood		
		R	S	I	M	R	S	I	M	L	R	S	I	M	L	R	S	I	M	L	R	S	I	M	L						
Early Succession	Snowshoe Hare	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	Mx	U	U	U				U	U	U	U	U	U	Mx, U	//	//	//	
	Ruffed Grouse																										//	//	//	//	
	Chestnut-sided Warbler																									//	//	//	//	//	
	Eastern Towhee (S)	//	//	//	//	//	//	//	//	//					U	U	U	//	//	//	//	//	//	//	//	//	//	//	//	//	//
	Magnolia Warbler	//	//	//	//	Mx	Mx	Mx	Mx	Mx	//	//	//	//	//	U	U	U				U	U	U				//	//	//	//
Mature	Fisher (S)																										//	X	X	X	
	Marten (N)	//	//			//					//	//	//	//													//	X	X	X	
	White-tailed Deer (N)																										//	//	//	//	
	Northern Goshawk																										//	X	//	//	
	Pileated Woodpecker	//	//			//	//				//	//									//	//					//	//		X	X
	Black-backed Woodpecker (N)	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//										//	?		X	X
	Barred Owl	//	//	//	//	//	//				//	//									//	//					//	X	X	X	X
	Wood Thrush (S)	//				//					//										//	//	//	//	//	//	//	X	//	//	//
	Pine Warbler	//	//	//	//	//	//	//	//	//		WP	WP		//	//	//	//	//	//	//	//	//	//	//	//	WP	//	//	//	//
	Black-throated Blue Warbler	//	//	U	U	//	//	U	U	U	//	//	//	//	//	//	//	//	Mx	Mx	//	//	//	//			//	X	//	//	//
	Northern Redback Salamander	//				//					//																//	//	//	//	//
LS	Late-successional Lichens	//	//			//	//	//			//	//			//	//	//										//	//	//	//	//
Riparian & Wetland	Beaver	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//		//	//	//	//	//
	Northern Waterthrush	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//							//	X	//	//	//
	Wood Turtle	//				//					//																//	X	//	//	//
	Northern Dusky Salamander	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//		//	//	//	//	//
	Brook Trout	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//	//		//	//	//	//	//
VP	Wood Frog																											//	//	//	//
	Spotted Salamander	//	//			//	//				//	//									//	//						//	//	//	//

Development Stage

R Regeneration
S Saplings and Small Poles
I Intermediate-aged Forest
M Mature
L Late Successional

Habitat Modifiers

Mx Mixed deciduous-conifer
WP White pine required
U Understory present
? More research needed

Habitat Use and Region

 Focus species for this habitat type
 Utilizes these habitats
 Low frequency use or absent from this habitat



Food

+



Water

+

+

=



Shelter

+



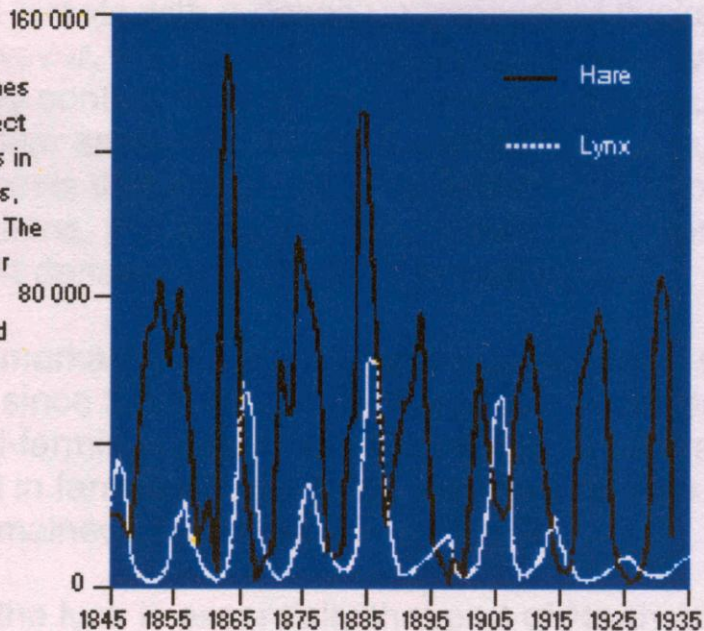
Space



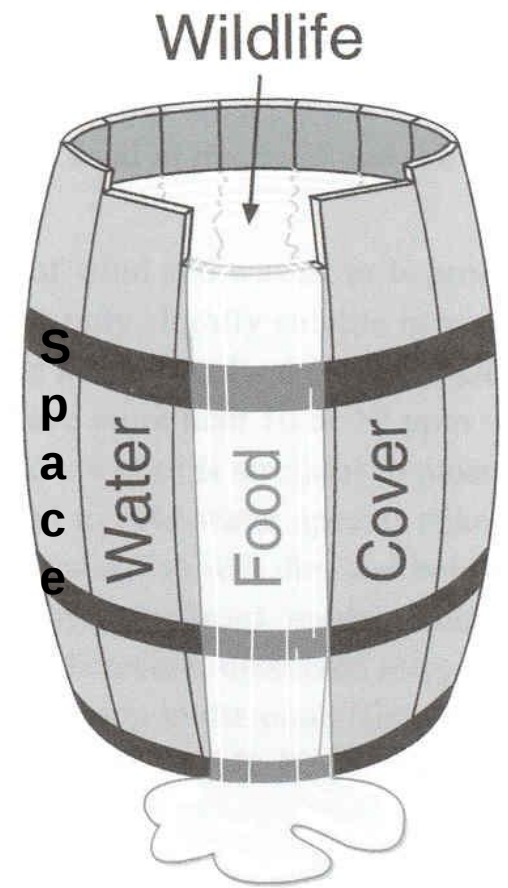


Figure 1

Increases and declines in lynx numbers reflect the population trends in its main prey species, the snowshoe hare. The figure is based on fur trapping data from MacLulich (1937) and Elton and Nicholson (1942).



Carrying Capacity: # of animals a habitat can support over time. **Not** a constant over time.

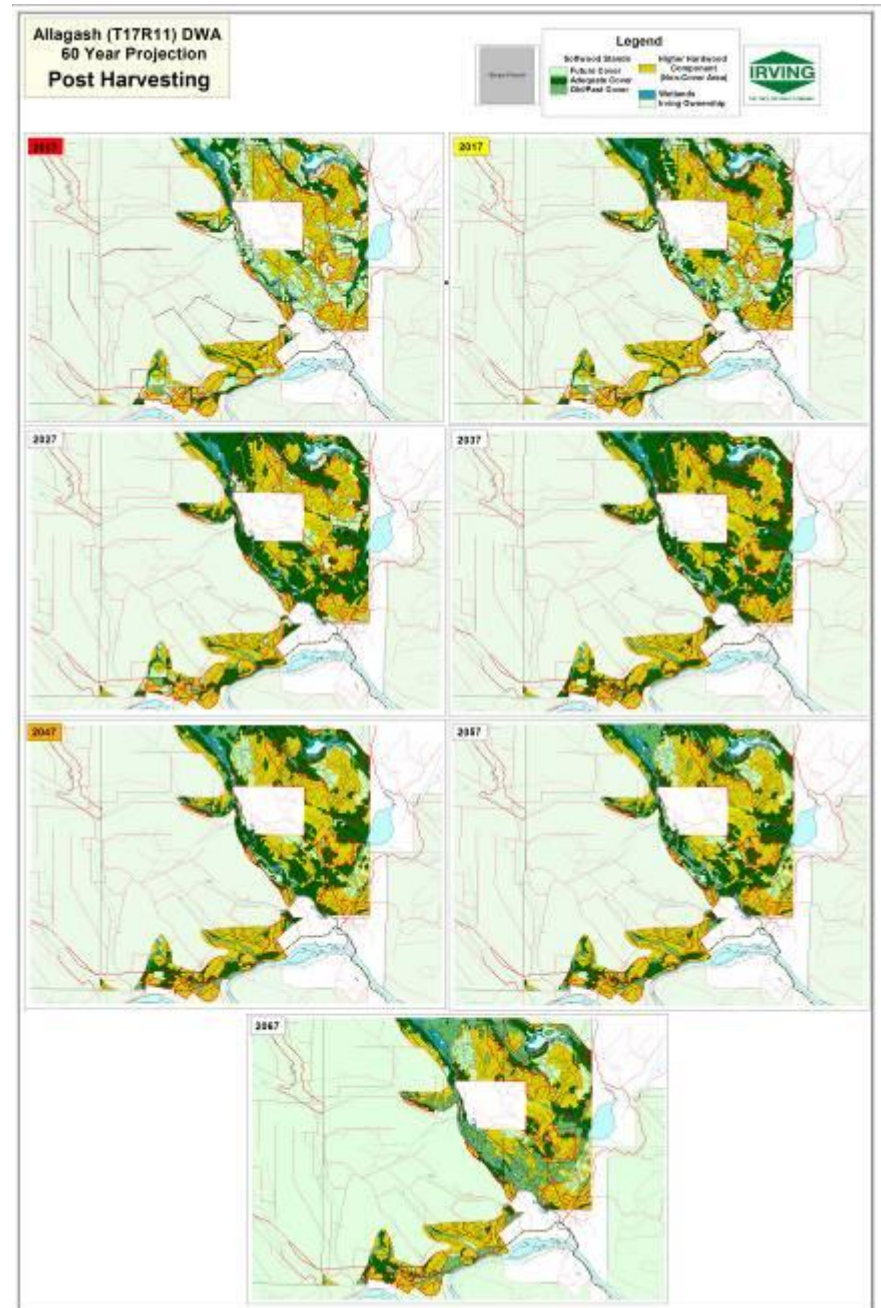


Carrying Capacity

Wildlife Management



Deer Wintering Areas (DWA's)

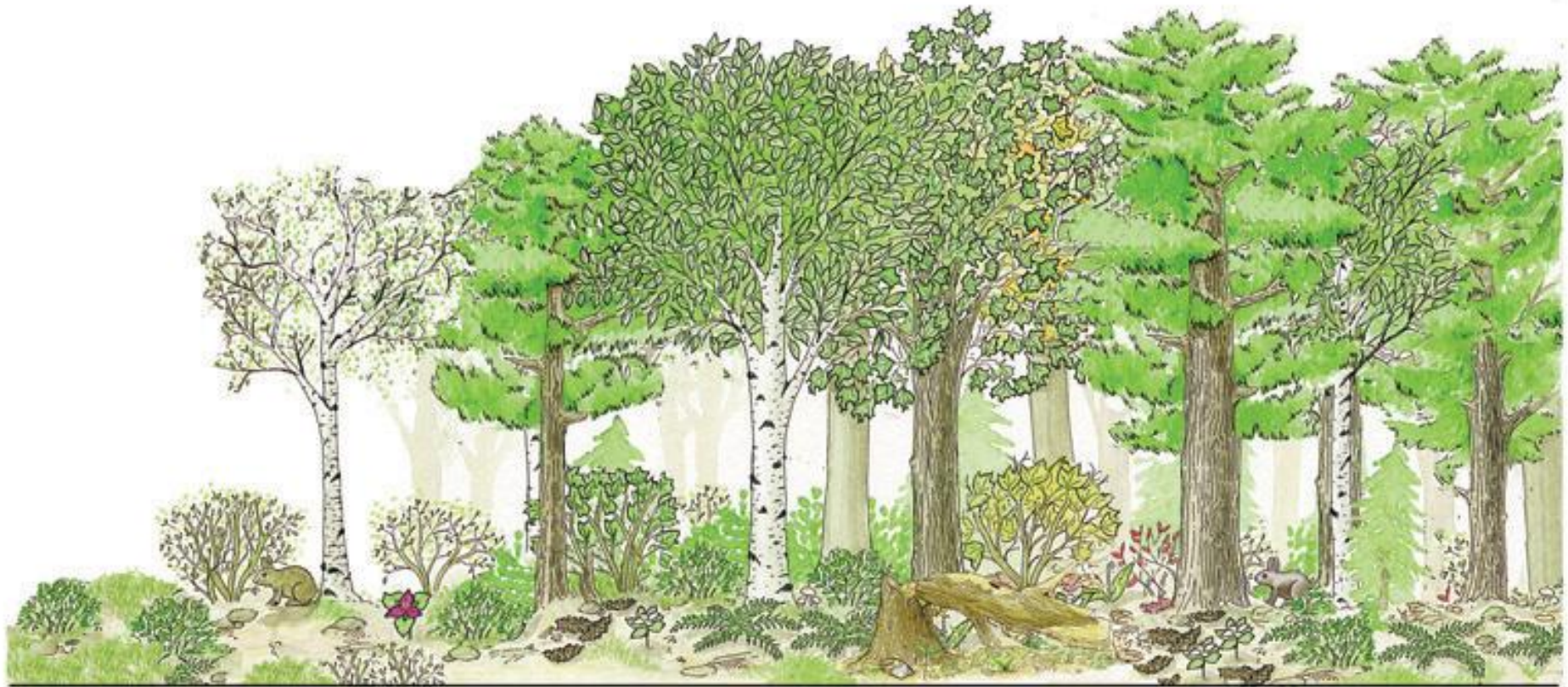


A photograph of a deer standing in a snowy forest. The deer is brown and white, looking towards the camera. The ground is covered in snow, and there are some green plants visible. The background is a dense forest of trees.

Ideal DWA's

- Sp/bF mix with some cedar & hardwood
(15+cm trees, 11+m tall)
- Min of 50-70% crown closure

Forest Succession



Plants Stage
First 5 years

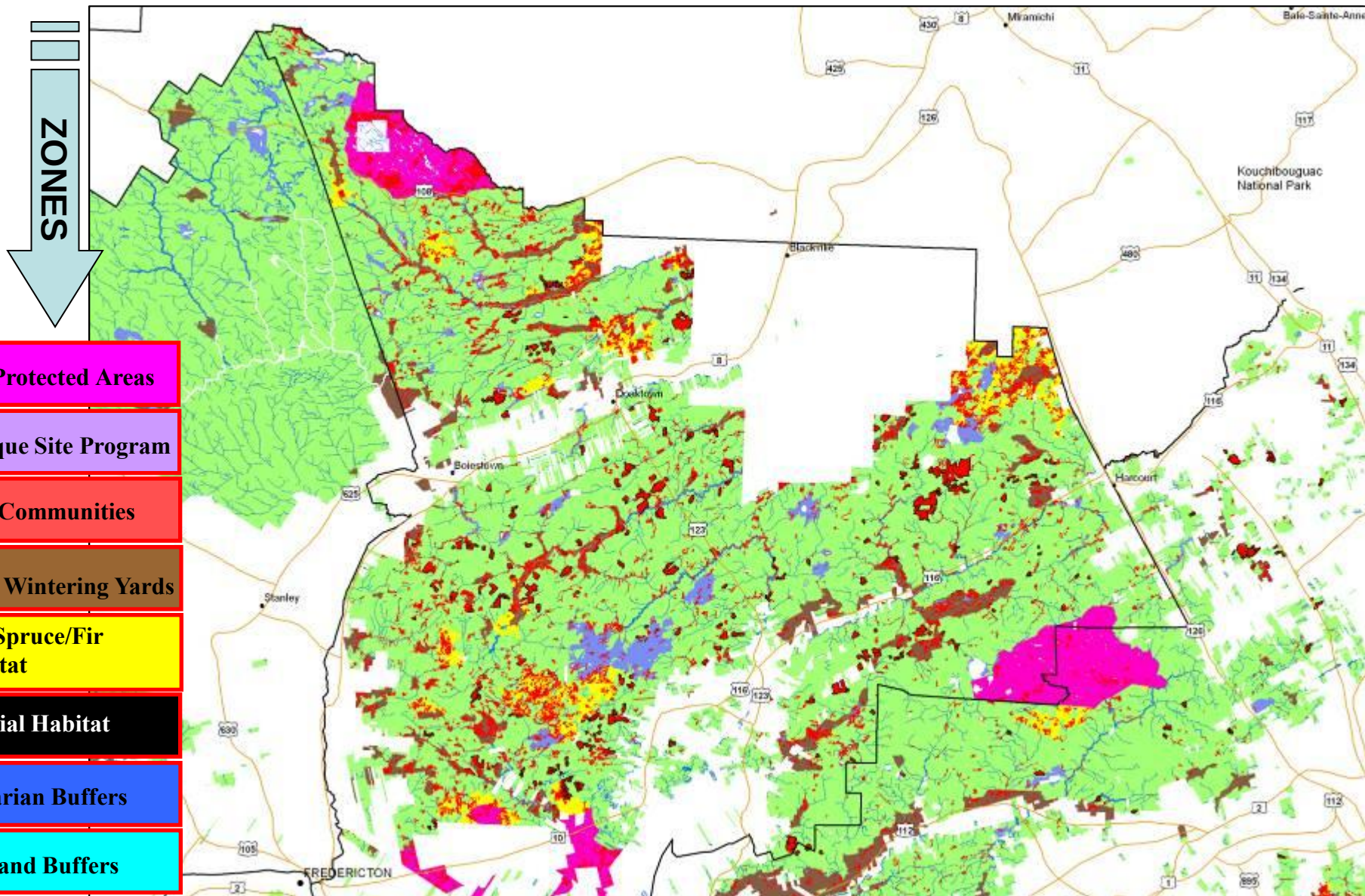
Shrub Stage
6-25 years

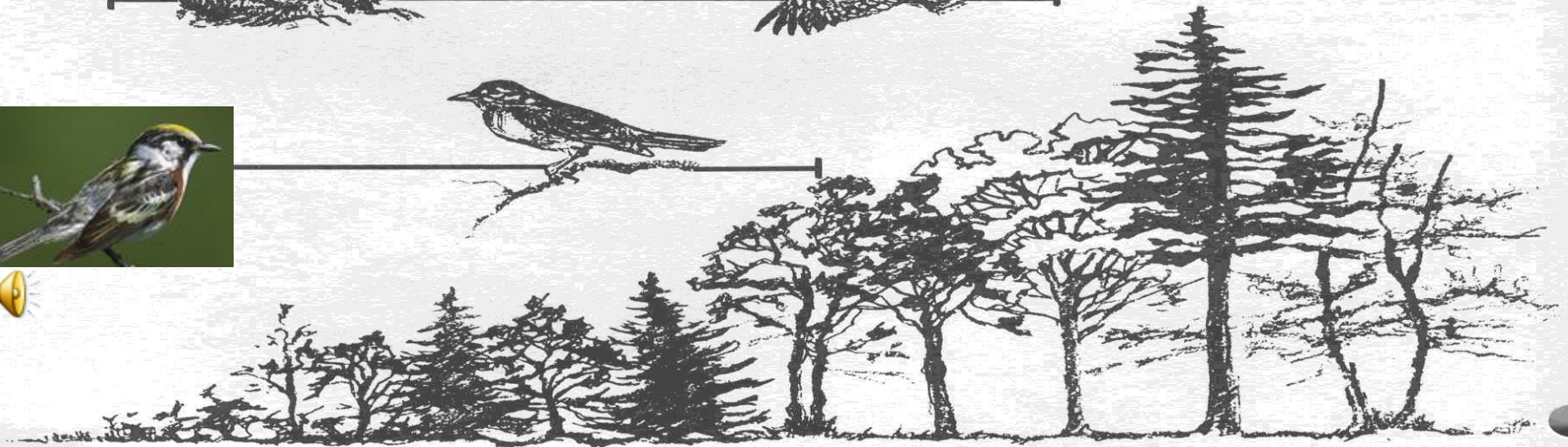
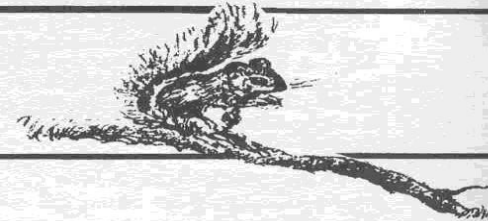
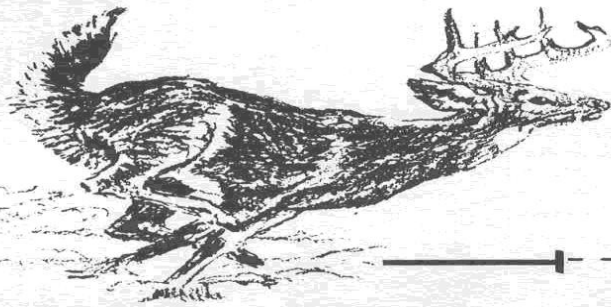
Young Forest
26 - 50 years

Mature Forest
51 - 150 years

Climax Forest
150 - 300 years

Habitat Inventory – Chipman District





Forest Openings

Shrub - Sapling

Pole

Mature

Old Growth

Maximizing Interior

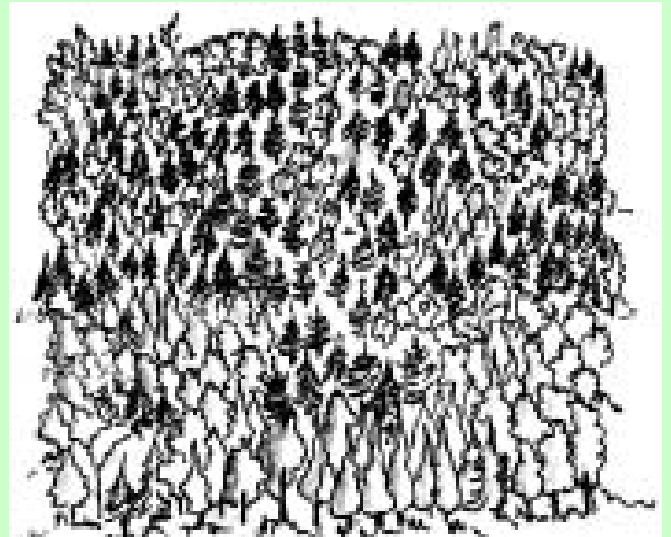
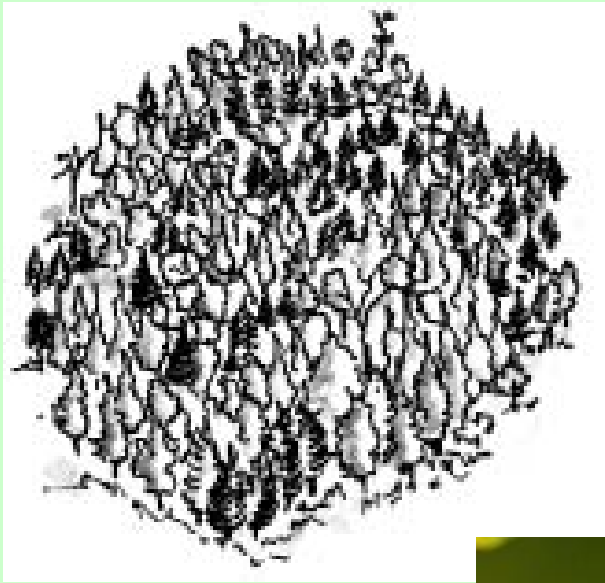
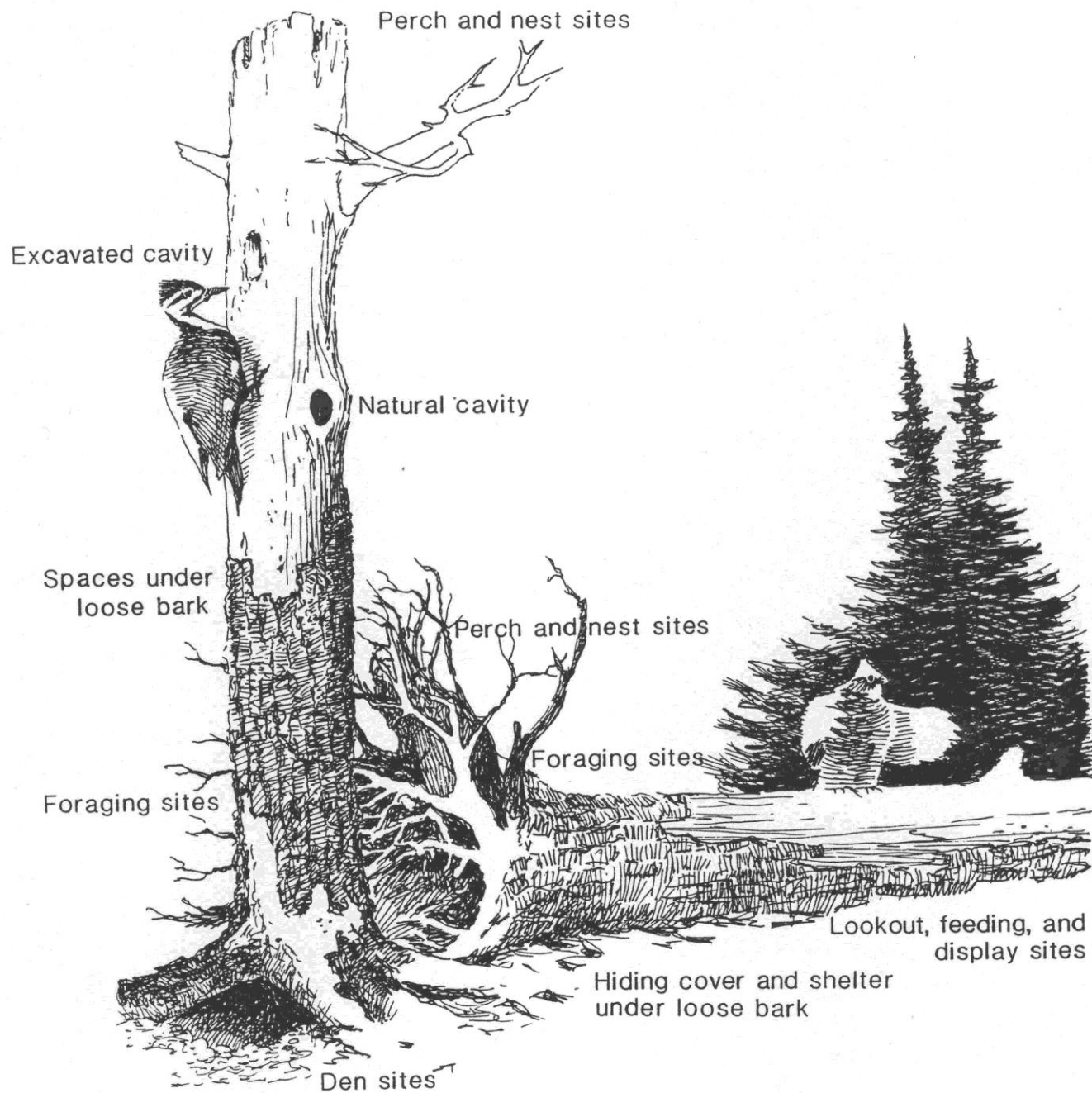


Figure 7. The shape edge and forest-interior square patches have long narrow-shaped patches.



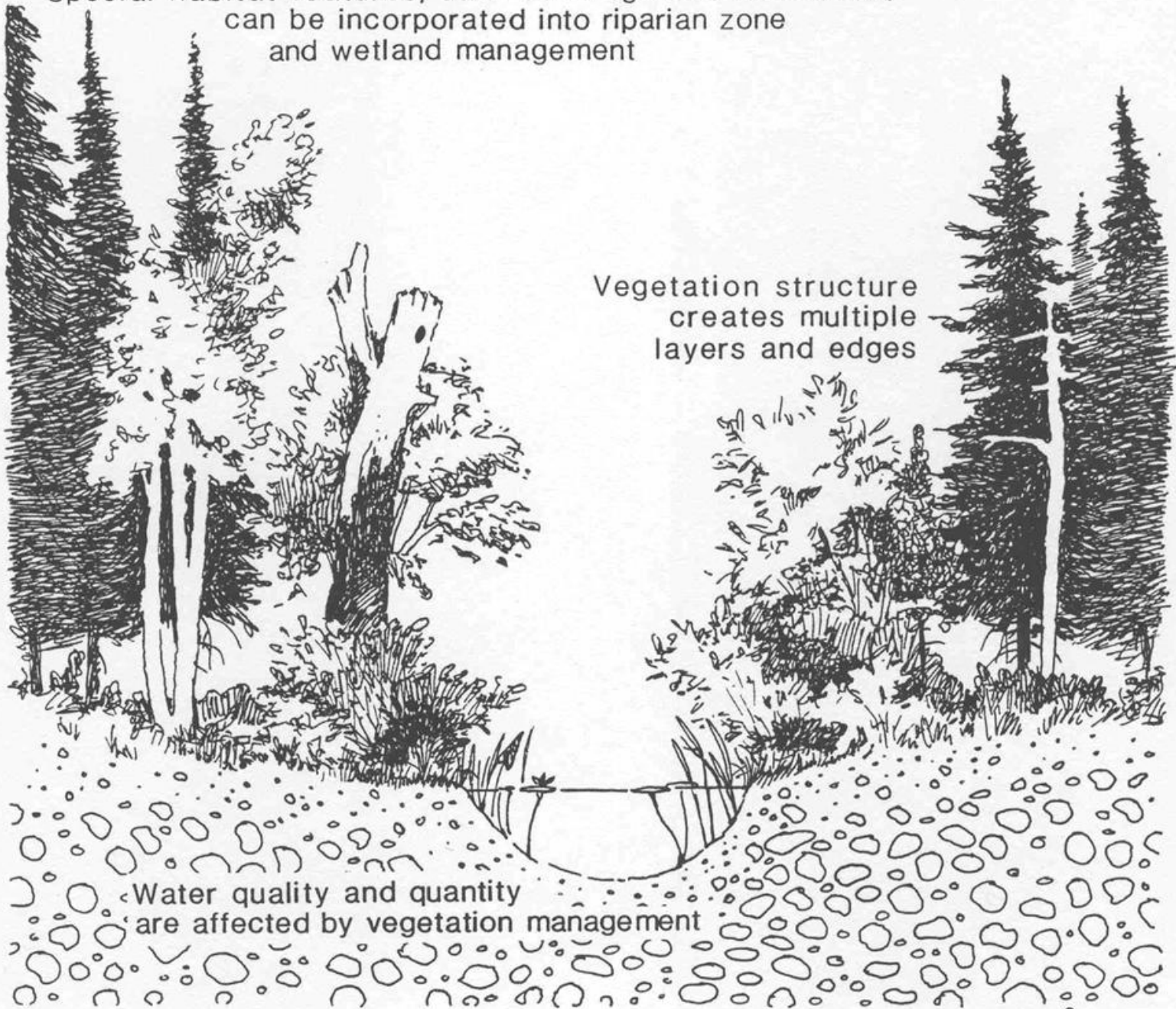


Establishing or Maintaining Vernal Pools

Special habitat features, such as snags and nest trees,
can be incorporated into riparian zone
and wetland management

Vegetation structure
creates multiple
layers and edges

Water quality and quantity
are affected by vegetation management





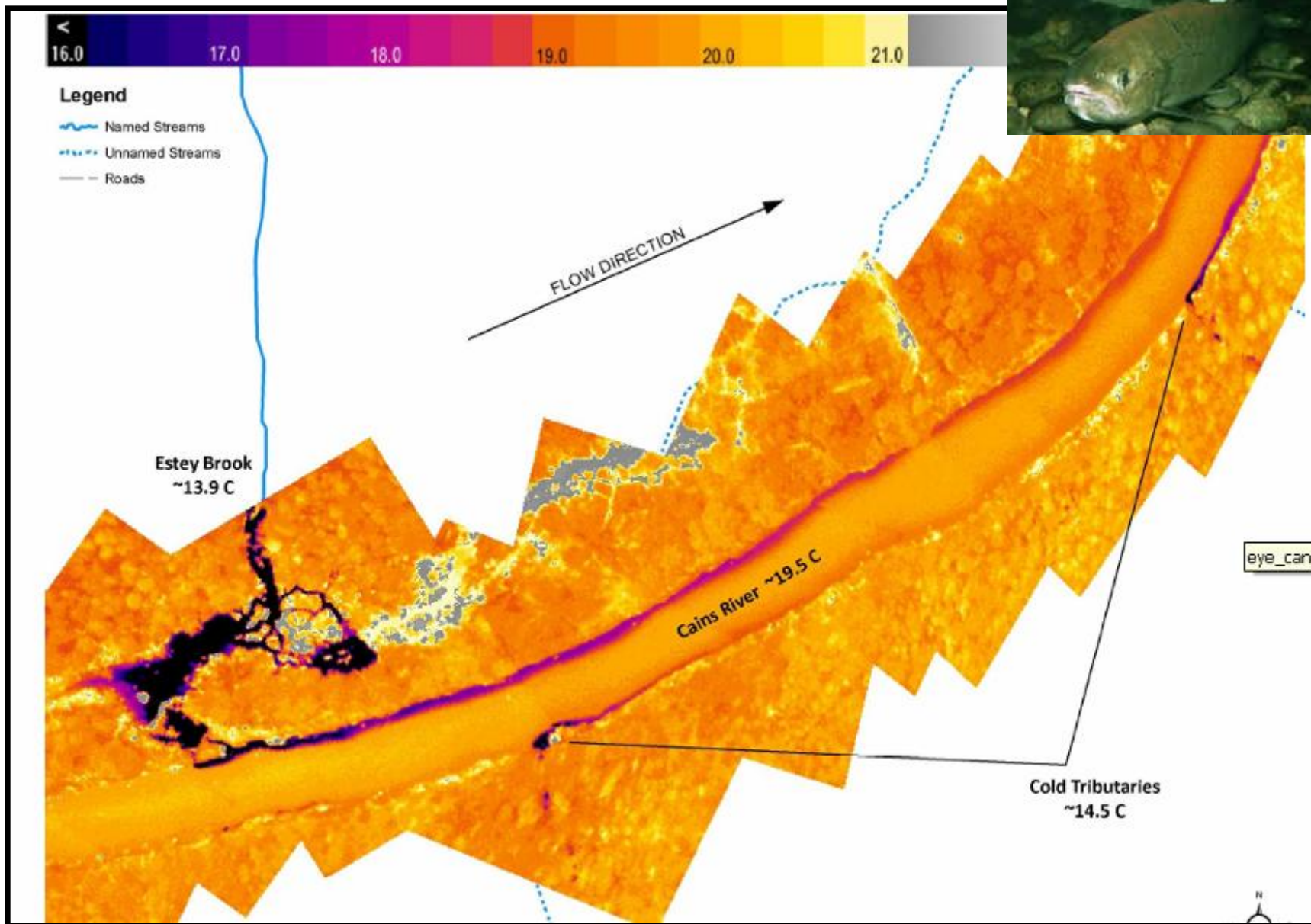
Habitat Elements



Figure 3. Pre-construction of boulder cluster habitat enhancement structures at the McIntosh Brook site, Little Main Restigouche River



Figure 4. Post-construction of boulder cluster habitat enhancement structures at the McIntosh Brook site, Little Main Restigouche River



Wildlife Mgmt Feedback Loop - Monitoring





NEW BRUNSWICK FURBEARER HARVEST REPORT 2013-2014




DUCKS
UNLIMITED

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NATURAL RESOURCES

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Who are we?

Northeastern Deer Research Study Partners



Natural Resources
Canada

Ressources naturelles
Canada



J.D. IRVING, LIMITED

What are we studying?

Research Objectives:

1. Seek a better understanding of the impact of intensive forest management on deer browse availability at a spatial and temporal scale relevant to deer populations (winter, summer range).
2. Seek a better understanding of the suitability of designated deer wintering areas to provide the required winter cover and food supply needed in various winter conditions (mild to severe winters).
3. Seek a better understanding of deer landscape use patterns in summer and various winter conditions (mild to severe winters).
4. Further develop and utilize latest technologies to survey deer populations and track deer movements (remote sensing, deer tracking / collaring technologies).
5. Further develop and utilize latest technologies to characterize deer food and winter cover conditions (GIS, Lidar enhanced forest inventory).
6. Develop and implement management strategies to improve deer food and winter cover availability where needed.