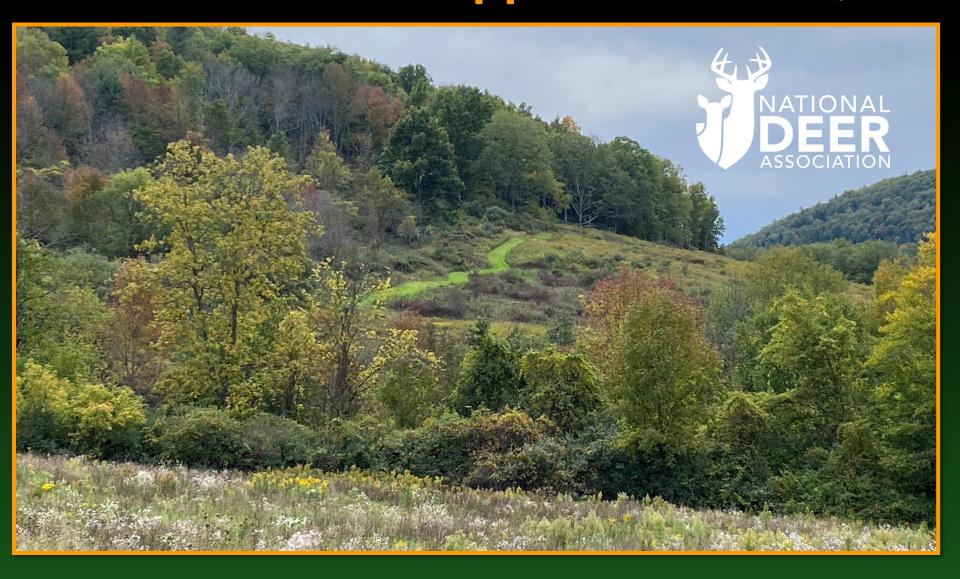
Habitat-focused Approaches to QDM



Kip Adams – NDA Chief Conservation Officer

Deer Hunting

- America's pastime
- Deer are among the most widespread wildlife species
- Deer are the most sought after game animal
- Nearly 8 of every 10 hunters identifies as a deer hunter



Deer Hunting

- 79% of American hunters pursue deer
 - > 11 million deer hunters
 - > 3.1 million turkey hunters
 - > 1.4 million duck hunters
 - > <1 million elk hunters



Deer Hunting

- Deer drive the hunting industry
 - Deer hunters spend >\$23 billion annually with a >\$50 billion total multiplier effect

Deer Hunter Opportunity

- National average = 134 days of total deer season
- •North Carolina = 149 days of total deer season



Deer Hunter Days Afield

- National average = 12 days hunting deer
- North Carolina average = 15 days hunting deer



Deer Hunter Density

- •National average = 5 deer hunters/square mile
- North Carolina = 5 deer hunters/square mile



Successful Hunters

•41% of hunters shot a deer in 2019/20 season

North Carolina = 49% of hunters shot a deer

•22% of NC hunters shot >1 deer in 2019/20

season (18% avg.)



Antlered Buck Harvest (PSM)



State	2020 Harvest
Delaware, Michigan, Pennsylvania	3.9
South Carolina	3.2
Maryland	3.0

North Carolina = 1.8

Top Antlerless Harvest (PSM)

State	2020 Harvest	
Pennsylvania	5.8	
Delaware, Maryland	5.1	
New Jersey	4.5	
Michigan, Wisconsin	3.4	
		A DES

North Carolina = 1.7

Buck Age Structure

~20% 1.5yrs

~38% 2.5yrs

~43% 3.5+yrs



North Carolina Summary

- Longer deer season than many other states
- Hunt more days than average from other states
- Deer hunter density = national average
- Hunters are more successful than average hunters
- Above average number shoot >1 deer per year
- Buck and antierless harvests = national averages
- Very balanced buck age structure



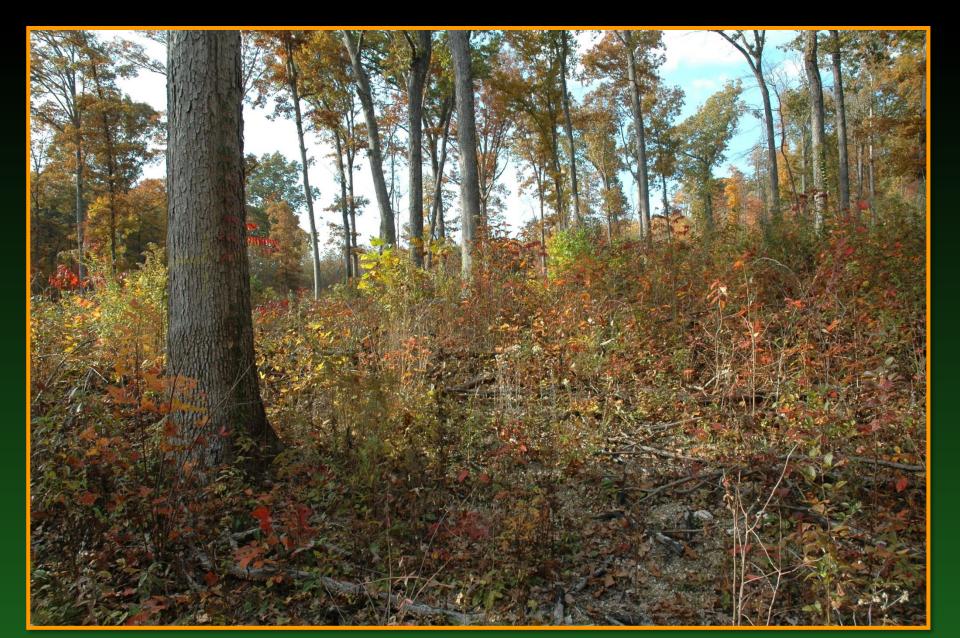
Quality Deer Management is...

The approach under which young bucks are protected from harvest, combined with an adequate harvest of female deer to produce healthy deer herds in balance with existing habitat conditions.

Four Building Blocks of QDM



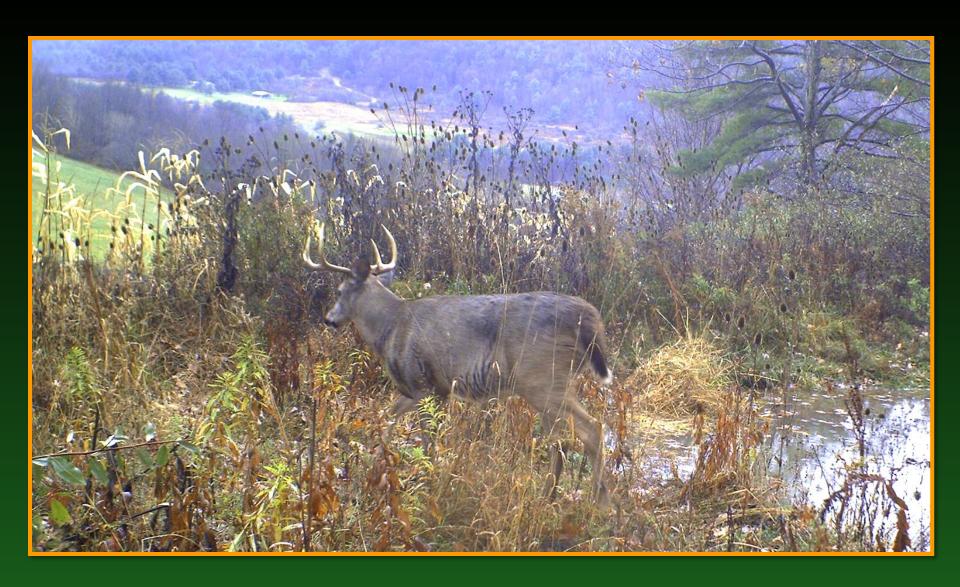
Good Habitat...



Important for does and fawns...



As well as bucks...

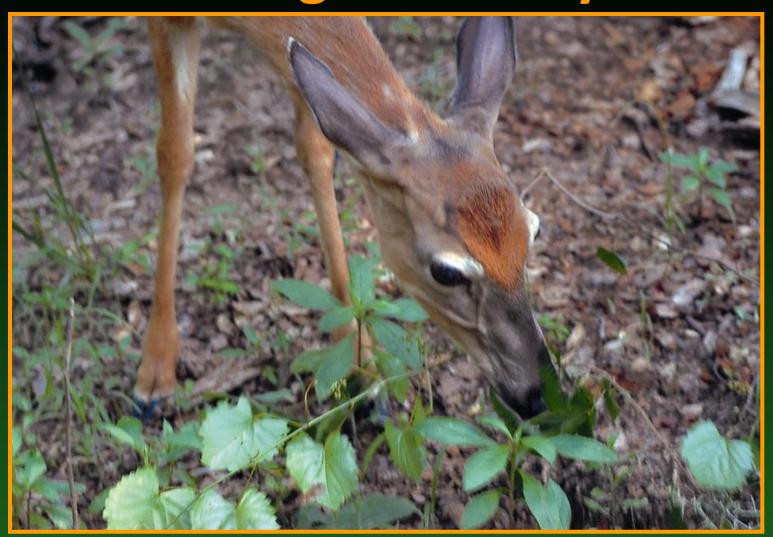


And for deer in all age classes...





Each deer eats about one ton of forage annually!



~16,000 pounds of forage is necessary for this group of deer...



Habitat Management

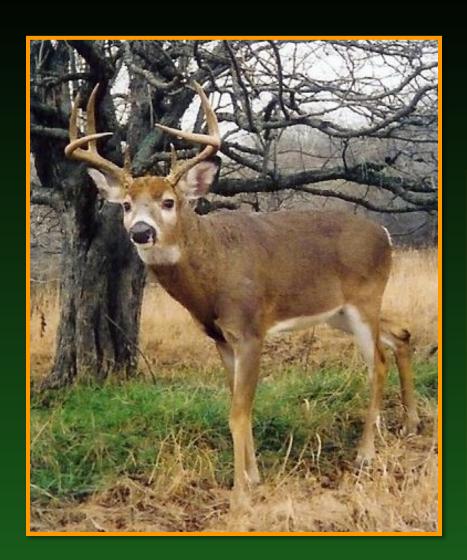


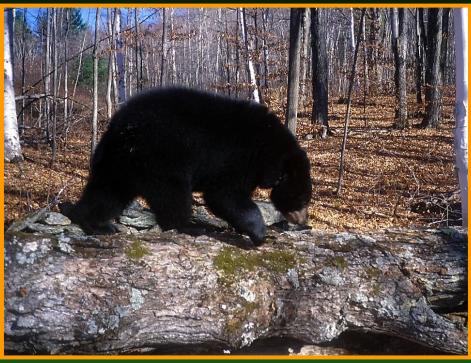
Forests, Old Fields and Food Plots

Prescribed Fire can be used in all 3



Goal is to provide year-round nutrition...





Provide Year-Round Nutrition - Spring -



Provide Year-Round Nutrition - Summer -





Provide Year-Round Nutrition — Fall —





Provide Year-Round Nutrition - Winter -





Forest Management



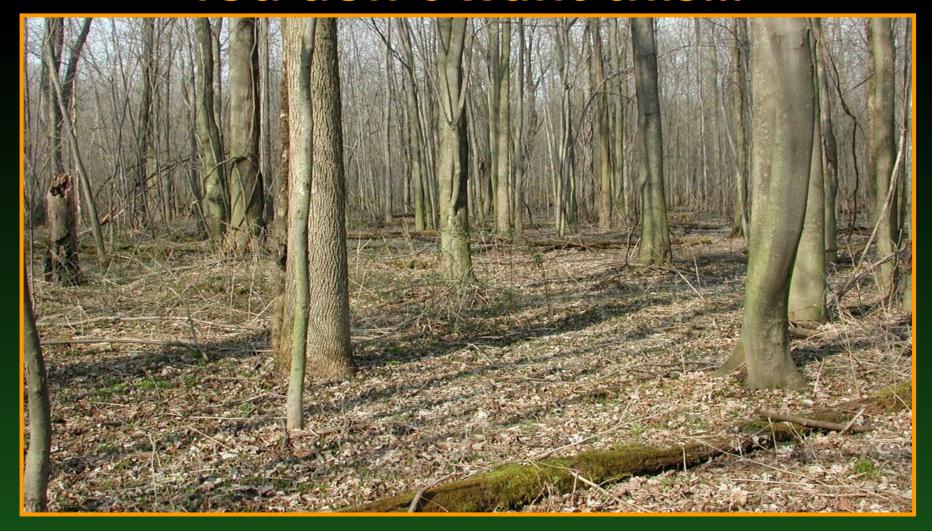
Typically 75+% of area

Provides food and cover...



Want diversity of stand types and age classes interspersed across the habitat

You don't want this...



This stand contains 50-100 lbs browse/acre

This is much better...



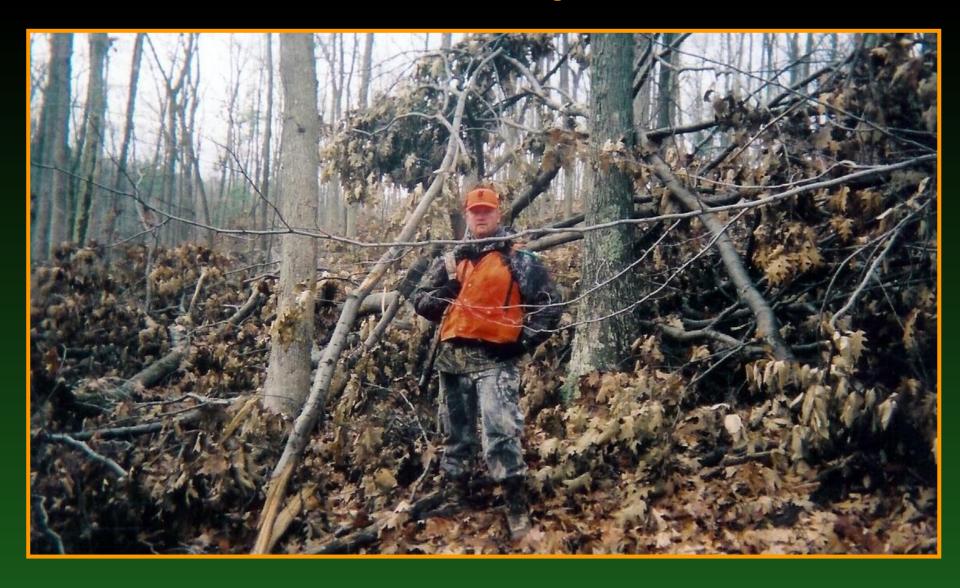
This stand contains up to 1,000 lbs browse/acre

Timber Mgt. & Prescribed Fire...



This stand contains up to 1,400 lbs browse/acre

Structure is important...



"Old Fields" Early Successional Vegetation



Typically 1-5% of area

Provide food and cover...



This field contains 2,000-4,000 lbs forage/acre

Forbs are extremely important...



Ideal fawning cover...



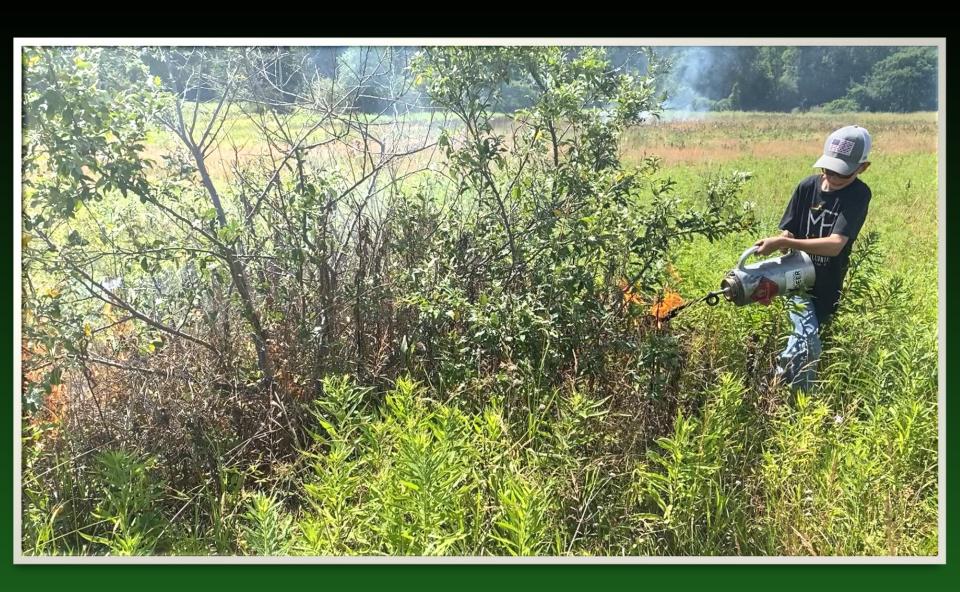
NWSG provide cover...



Fire is extremely beneficial...



Spot spraying...



Old field are maintained by...

- Prescribed fire
- Disking
- Mowing
- Crushing with roller chopper/dozer
- Herbiciding
- Combination of methods



Food Plots



Typically 1-5% of area

Food Plots



Can provide 2,000-8,000 lbs forage/acre

Provide food and some cover...





Are used to supplement native vegetation

Fire for food plot preparation...



What to Plant







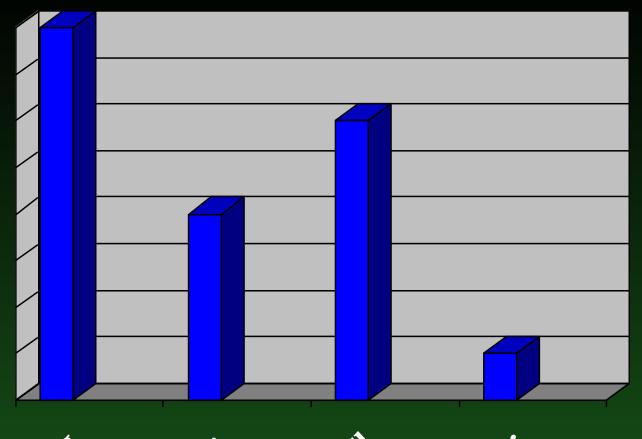


Cool-Season Perennials

- Alfalfa
- White Clover
- Red Clover
- Chicory



Provide Year-Round Nutrition



Spins

Summer

eal

Winter

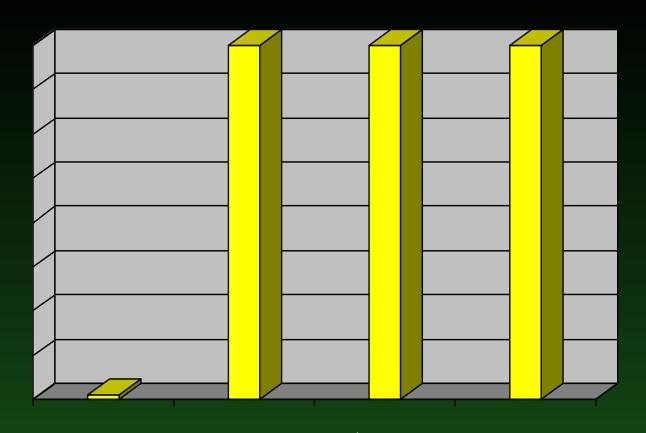
Cool-Season Perennials

Warm-Season Annuals

- Corn
- Soybeans
- Cowpeas
- Lablab
- Sorghum



Provide Year-Round Nutrition



Spino

Sunne

Eall

Winter

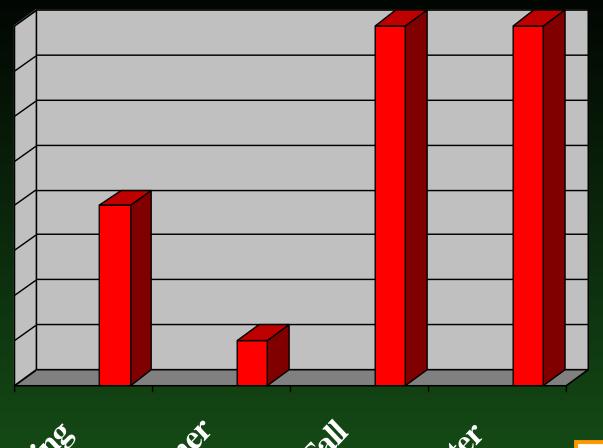
Warm-Season Annuals

Cool-Season Annuals

- Brassicas
 - turnips
 - rape
 - kale
- Oats
- Spring/Winter Wheat
- Spring/Winter Rye
- Austrian Winter Pea

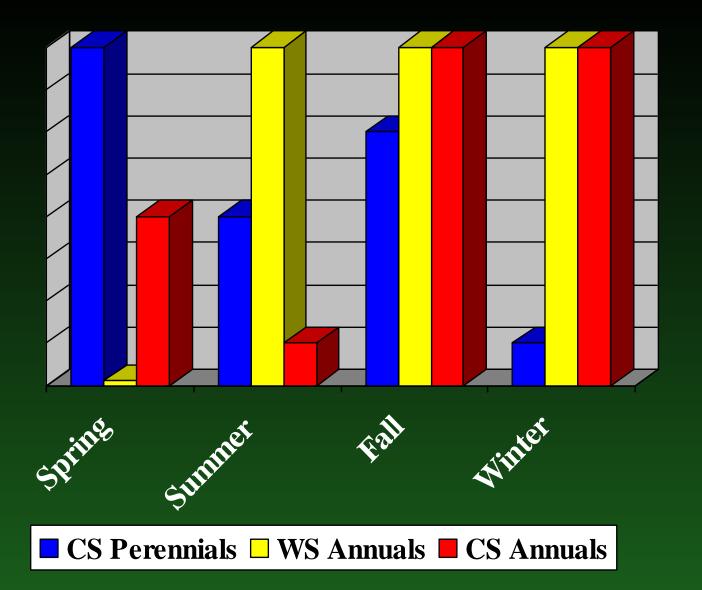


Provide Year-Round Nutrition



Cool-Season Annuals

Provide Year-Round Nutrition

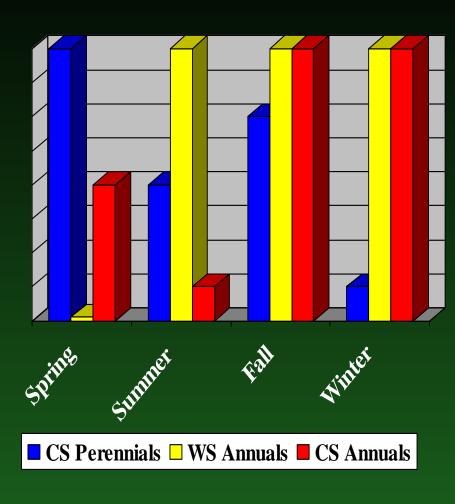


Recommendations for Nutritional Plots (1-5 acres)

 ~33% in cool-season perennials (clovers)

 ~33% in cool-season annuals (brassicas)

~33% in warmseason annuals (corn, soybeans)



Plant and...

Pray for Rain!

Proper habitat management provides...







Year around cover...



Softwood species

Year around cover...



Hardwood species

Year around cover...



Old fields/NWSG

Proper habitat management also provides...









Agricultural





Hard mast



Soft mast







Vines and shrubs







Hardwood browse





Softwood browse

Fantastic hunting...



'Carrot' is better deer hunting...



Good deer habitat benefits many other species...







