

# Venison: From Field to Table

## Food Plots for Deer

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# Discussion Topics

- Selecting a Menu for Deer
  - ❖ What to Plant
- More Bang for Your Buck
  - ❖ Management on a Conservative Budget
- Planning for Next Year
  - ❖ For Best Results, Plan Ahead



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# Selecting a Menu

## A.54. Approximate Diet Selection of Grazing Animals when Offered in a Mixed Pasture.

Animal species	Type of diet		
	Grasses	Broadleaf weeds and legumes	Browse <sup>1</sup>
Cattle	65-75	20-30	5-10
Horses	70-80	15-25	0-5
Sheep	45-55	30-40	10-20
Goats	20-30	10-30	40-60
White-tail deer	10-30	30-50	30-50
Elk, red, and fallow deer	30-60	40-50	10-30

<sup>1</sup>Shrubs or trees.

Source: D. Forbes and G.W. Evers, Texas A&M Univ.; D.I. Bransby, Auburn Univ.; M.A. McCann, Virginia Tech Univ.; and W.R. Getz, Fort Valley State Univ.



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## Factors to Consider

- What does your property already have?
- What does your property lack?
- How does the plant composition change through the year?
- How does the lifecycle of the deer fit with those changes?

### GOAL:

*Build a system that supplies the whole diet of the deer on your property.*



## At a Glance

Mating: Polygamous

Peak Breeding Activity: Early to mid-November; begins as early as mid-October and runs through mid-January

Gestation: 187-222 days; average 200 days

Young are Born: Mid-May through July; peak in late May through mid-June

Litter Size: 1 in first year; 2 and sometimes 3 in later years

Young Leave Parents: Weaned at 10-12 weeks

Number of Litters per Year: 1

Adult Weight: Males-130-300 pounds; females-90-210 pounds

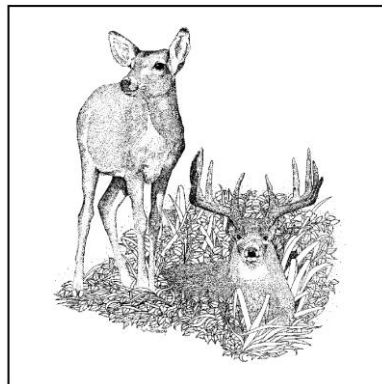
Adult Body Length: 52-95 inches

Life Expectancy: Up to 15 years, but the average is 2 years for males and 3 years for females in the wild

Migration Pattern: Year-round resident; home range is 1/2 -2 square miles

Typical Foods: Include wild crabapple, corn, sumac leaves and stems, grasses, clover leaves, jewelweed leaves, acorns, and dogwood fruits and stems

Native to Ohio: Yes.



2016

JANUARY	FEBRUARY	MARCH	APRIL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
MAY	JUNE	JULY	AUGUST
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SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
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**SPRING & FALL**

**Cool-Season ( $C_3$ )**

**VS.**

**Warm-Season ( $C_4$ )**

**SUMMER**

# Perennial vs. Annual

**SUMMER or WINTER?**



## Grasses: 10-30% of White Tail Diet

- DO NOT plant perennial cool-season grasses
  - fescue, orchardgrass, timothy, bluegrass, etc.
- PLANT annual grasses
  - wheat, rye, oats, millets, corn etc.
- CONSIDER native perennial grasses
  - switchgrass, indiangrass, and/or bluestems

Photos by Dr. Craig Harper



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## Legumes & Forbs: 30-50% of White Tail Diet

- Legumes provide essential protein for growing animals
  - beans, peas, clovers, alfalfa
- Forbs provide protein and carbohydrates
  - brassicas (turnips, beets, kale, rapeseed, radishes), chicory, sunflowers

### Remember:

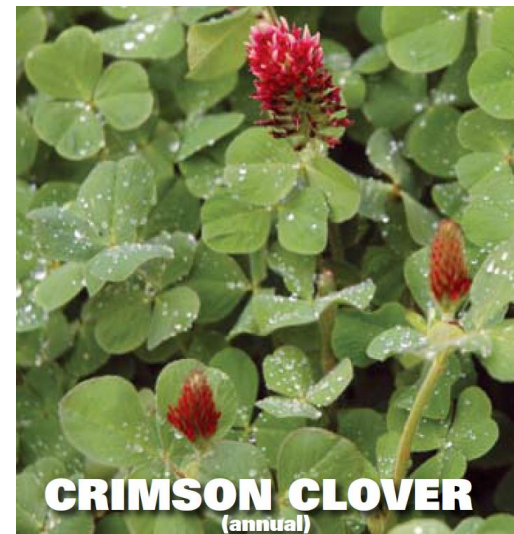
*BROWSE is still 30-50% of the deer's diet, so use planted plots to **complement** the browse already available.*



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Photo by Dr. Craig Harper



## A.55. Characteristics of Selected Plants for Wildlife.

	Tolerance to soil acidity <sup>1</sup>	Annual or perennial	Fertility needs <sup>2</sup>			Tolerance to wet soils <sup>1</sup>
			N	P	K	
Alfalfa	P	P	NA	H	H	P
<del>American jointvetch</del>	<del>F</del>	<del>A</del>	<del>NA</del>	<del>M</del>	<del>M</del>	<del>F</del>
<del>Annual lespedeza</del>	<del>G</del>	<del>A</del>	<del>NA</del>	<del>L</del>	<del>L</del>	<del>P</del>
Browntop millet	G	A	H	M	M	F
<del>Chufa</del>	<del>G</del>	<del>A</del>	<del>M</del>	<del>M</del>	<del>M</del>	<del>G</del>
Egyptian wheat	P	A	H	M	M	P
<del>Florida beggarweed</del>	<del>G</del>	<del>A</del>	<del>NA</del>	<del>M</del>	<del>M</del>	<del>E</del>
Foxtail millet	G	A	H	M	M	F
Japanese millet	G	A	H	M	M	E
Sorghums	P	A	H	M	M	P
Cowpea	G	A	NA	M	M	P
Partridge pea	G	A	NA	L	L	G
Proso millet	G	A	M	M	M	P
Sericea lespedeza	E	P	NA	L	L	P
<del>Sesame</del>	<del>P</del>	<del>A</del>	<del>L</del>	<del>M</del>	<del>M</del>	<del>P</del>
<del>Sesbania</del>	<del>G</del>	<del>A</del>	<del>NA</del>	<del>L</del>	<del>L</del>	<del>E</del>
Shrub lespedeza	E	P	NA	M	M	P
Sunflower	F	A	L	H	H	P
Velvetbean	F	A	NA	M	M	P
Annual ryegrass	F	A	H	H	H	G

<sup>1</sup>E = Excellent; G = Good; F = Fair; P = Poor

<sup>2</sup>NA = Not applicable; properly inoculated legumes fix N that they use for growth.

H = High; M = Medium; L = Low

# More Bang for Your Buck (\$)



\$4/lb. “name brand”  
from the box store  
\$2/lb. from SWCD



\$8/lb. “name brand”  
from the box store  
\$3-4/lb. from SWCD



\$12/lb. “name brand”  
from the box store  
\$5/lb. from SWCD



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# Check Seeding Rates & Seed Mix %

## Planting Chart

Seed Variety	Seeding Rate Lbs. Per Acre	Seeding Depth/Inches	Suggested Planting Dates	Annual Perennial
<b>Wildlife Blends</b>				
12 Point Buck	18-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Beet Max	4-6	1/2 - 1	April-July	Annual
Chicory Extreme	18-20	1/4 - 1/2	Spring, Fall	Perennial
Classic Whitetail	18-20	1/4 - 1/2	Spring, Fall	Perennial
Deer Max	8-10	1/4 - 1/2	Sept.-Oct.	Annual
Frontage Blend	18-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Hidden Spot	25-30	1/4 - 1/2	April-Sept.	Perennial
Platinum Ultra	18-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Wilderness Mix	35-40	3/4 - 1	April-June	Annual
Woodland Trail Mix	40-45	1/4 - 1/2	April-Sept.	Perennial
<b>Clovers</b>				
Alsike Clover	8-12	1/4	Spring, Fall & Frost Seed	Perennial
Berseem Clover	12-16	1/4 - 1/2	May-June	Annual
Crimson Clover	15-20	1/4 - 1/2	April-June / Aug.-Oct.	Annual
Cyclone Clover	15-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Durana Clover	8-10	1/8 - 1/4	Spring, Fall & Frost Seed	Perennial
Duration Clover	18-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Jumbo Ladino Clover	8-10	1/8 - 1/4	Spring, Fall & Frost Seed	Perennial
Kopu II Clover	8-10	1/8 - 1/4	Spring, Fall & Frost Seed	Perennial
Kura Clover	10-12	1/4 - 1/2	April-June	Perennial
Mammoth Clover	15-20	1/4 - 1/2	April-May / Aug.-Sept.	Annual
Medium Red Clover	18-20	1/4 - 1/2	Spring, Fall & Frost Seed	Perennial
Platinum Ladino Clover	8-10	1/8 - 1/4	Spring, Fall & Frost Seed	Perennial
<b>Grain and Cover Crops</b>				
Buckwheat	40-50	1 - 2	April-Sept.	Annual
Austrian Winter Pea	40-50	3/4 - 1	Sept.-Oct.	Annual
Buck Forage Oats	100-125	1 - 2	April-June / Aug.-Sept.	Annual
Egyptian Wheat	8-10	3/4 - 1	May-June	Annual
Everleaf 126 Oats	60-80	1 - 2	April-June / Aug.-Sept.	Annual
Grain Rye	90-125	1 - 2	Aug.-Sept.	Annual
GroundHog Radish	10-12	1/4 - 1/2	May-Aug.	Annual
Packer Forage Pea	25-35	3/4 - 1	May-June / Aug.-Sept.	Annual
<b>Seed Variety</b>	<b>Seeding Rate Lbs. Per Acre</b>	<b>Seeding Depth/Inches</b>	<b>Suggested Planting Dates</b>	<b>Annual Perennial</b>
<b>Alfalfa</b>				
A 5225 Alfalfa	15-20	1/4 - 1/2	March-May/Aug.-Sept.	Perennial
Merit Wetland Alfalfa	15-20	1/4 - 1/2	March-May/Aug.-Sept.	Perennial
Merit Gold Alfalfa	15-20	1/4 - 1/2	March-May/Aug.-Sept.	Perennial
Birdsfoot Trefoil	12-15	1/4	Feb.-May / Aug.-Sept.	Perennial
<b>Brassicas</b>				
Bonar Forage rape	8-10	1/4 - 1/2	May-Aug.	Annual
Dwarf Essex Rape	8-10	1/4 - 1/2	April-Aug.	Annual
Keeper Kale	8-10	1/4 - 1/2	April-July	Annual
Maris Kestrel Kale	8-10	1/4 - 1/2	April-July	Annual
Oasis Forage Chicory	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Perennial
Grouse Forage Chicory	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Perennial
Pasja Hybrid Forage	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Annual
T-Raptor Hybrid	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Annual
<b>Wildlife Beets and Turnips</b>				
Appin Turnip	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Annual
Barkant Turnip	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Annual
Purple Top Turnip	8-10	1/4 - 1/2	April-May / Aug.-Sept.	Annual
Winfred Hybrid	4-8	1/4 - 1/2	April-May / Aug.-Sept.	Annual
Sugar Beet	4-8	1/4 - 1/2	April-June	Annual
Major Plus Swede	4-8	1/4 - 1/2	April-June	Annual
Poly Fodder Beet	4-8	1/4 - 1/2	April-June	Annual
<b>Millet and Sorghum</b>				
Japanese Millet	25-30	1/4 - 1/2	April-Sept.	Annual
Hybrid Pearl Millet	25-30	1/4 - 1/2	April-Sept.	Annual
White Proso Millet	25-30	1/4 - 1/2	April-Aug.	Annual
Martin Grain Sorghum	15-20	1 - 1 1/2	May-June	Annual
Forage Soybean	60-80	3/4 - 1	April-June	Annual
<b>Native warm Season Grass</b>				
Switchgrass	8-10 PLS	1/4	April-May	Perennial
Big Blue Stem	8-10 PLS	1/4	April-June	Perennial
Little Blue Stem	8-10 PLS	1/4	May-July	Perennial
Indiangrass	8-10 PLS	1/4	April-June	Perennial

This chart is correspondent to the varieties sold by Noble County SWCD.

## Tips for Buying and Storing Seed

- In general, as seed ages, germination % decreases, so check the date of production.
- Check for % of inert matter and “other” seed.
- Buying in bulk will yield a better \$/lb., but extra seed will decrease in quality over time.
- Store extra seed in cool and dry location.



## Don't Forget: Consider Establishment and Maintenance Costs...

- What equipment will you need?
  - tractor, ATV, brush hog, plow, drill?
- What management tools will you use?
  - soil tests, fertilizers, herbicides?
- How will you evaluate success?
  - deer counts, exclusion cages, budget goals?



Fig. 4.8 Drilling seed is a most reliable planting technique. All seed are easily planted at the desired depth and germination rates are higher, thus less seed is required per acre.



Photos by Dr. Craig Harper



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# Planning for Next Year

*“Well this sounds great!  
How do I get started?”*



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## Set goals that fit your system, not your neighbor's.

- Bigger plots are not necessarily better plots.
- Plot placement should be carefully considered.
- Soil test.
- Use your calendar to stay on track.
- Identify your limitations.
- Have fun!



Photo Courtesy of ODW



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## Plot Location and Size

- Consider Animal Movement
  - Narrow strips, away from roads, in sunny spaces, adjacent to wooded areas **are ideal.**
- Consider Ease of Access to You
  - This will determine what equipment you can use, your ability to monitor utilization, and overall satisfaction.
- **Soil Test**
  - A crop is only as good as the soil beneath it.



## Mark Your Calendar

- Make notes of your ideal times to prepare, plant, and care for the plots.
- Buy seed before the ideal day to plant comes.
- Make plans to rent or borrow equipment in advance.

<http://nobleswcd.org/>



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## Stick to Your Budget

- Shop around for the best values.
- Barter with friends and neighbors with similar interests.
- Use public services vs. private services.
- Make efficient choices.
- Consider other ways to save.
  - If you rent out property or host hunters during deer season, use these as opportunities to benefit your system.



# Thank you for coming tonight!

## Questions?



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