



Acknowledgements

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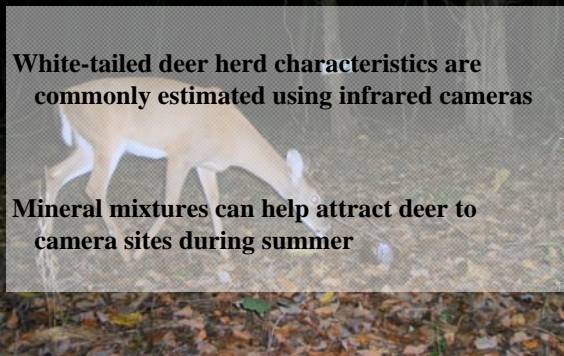
David Hopkins, Tanasi Girl Scout Camp



Outline

- Justification
- Background Information
- Objectives
- Study Site
- Study Design
- Methods
- Results
- Discussion
- Management Implications

Justification



White-tailed deer herd characteristics are commonly estimated using infrared cameras

Mineral mixtures can help attract deer to camera sites during summer

Background Information

Research has failed to show trace mineral mixtures influence physical or physiological characteristics of white-tailed deer

Dietary intake of P and Ca by male deer should be adequate for antler growth (Ullrey et al. 1975,1982)

The natural diet of deer provides adequate nutrition in most cases (Jones and Weeks 1985)

Surveying methods

Infrared triggered cameras

Advantages
ease of use
cost effective
individual characteristics

Disadvantages
costly
time consuming

Assumptions
equal use of age and sex



Camera Survey

The type of supplement used to attract deer to camera sites is a major consideration

corn

trace mineral salt products

other commercial products



Study site

Tanasi Girl Scout Camp

Union County, TN

45 min. north

500 acres

~ 85 deer / sq. mile

Two Rivers Pavilion

Blount County, TN

20 min. south

200 acres

~ 90 deer / sq. mile



Objectives

Evaluate various mineral mixtures

Preference

Cost Efficiency

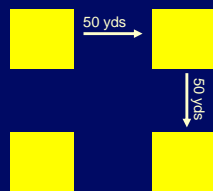


Study design

3 sites

Each salt replicated on all sites

Cameras placed 50 yds apart



Mineral mixtures

NaCl: 90 – 95%

~ \$10.00 / bag

25 lb bag



Mineral mixtures

NaCl: 90 – 95%

~ \$5.00 / bag

50 lb bag

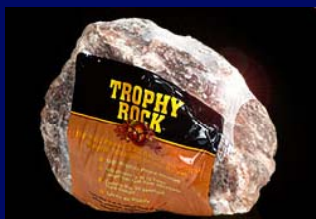


Mineral mixtures

NaCl: 91 – 96%

~ \$15.00 / rock

16 lb rock



Mineral mixtures

NaCl: 40– 45%

~ \$10.00 / bag

6 lb bag



Mineral mixtures

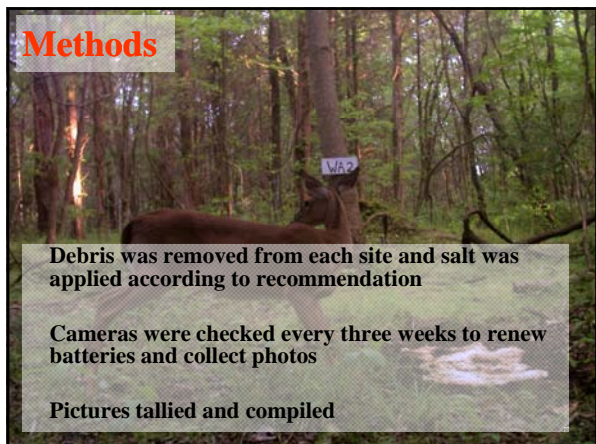
NaCl: 40 – 45%

~ \$8.00 / bag

5 lb (20 lb bag)



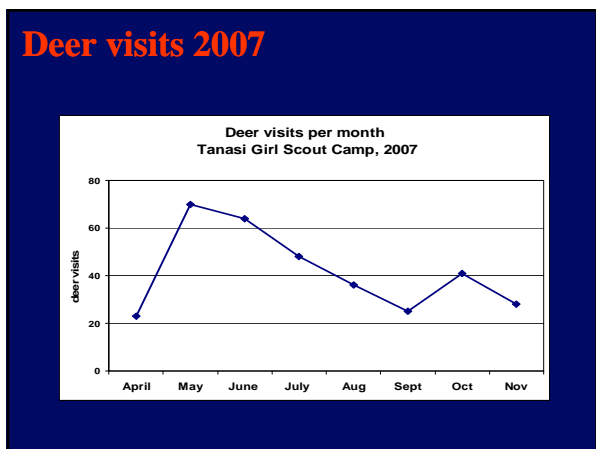
Methods

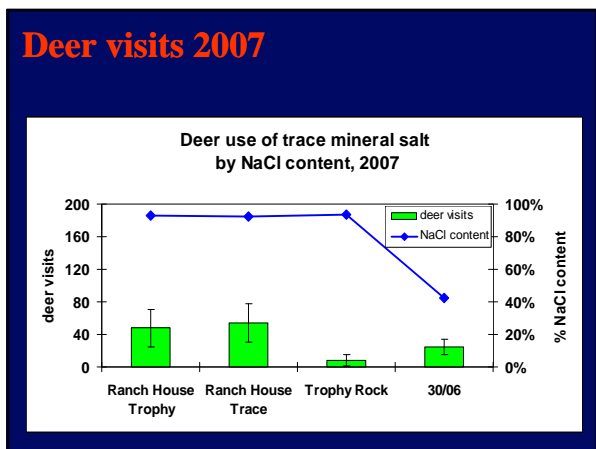


Debris was removed from each site and salt was applied according to recommendation

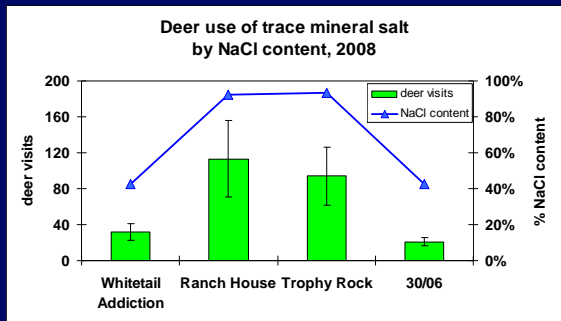
Cameras were checked every three weeks to renew batteries and collect photos

Pictures tallied and compiled





Deer visits 2008



Discussion

Need for salt
Increased use of high sodium mixtures

<u>product</u>	<u>cost / visit</u>
Ranch House Trophy	\$ 0.21
Ranch House Trace	\$ 0.07
Trophy Rock	\$ 0.35
Imperial Whitetail 30/06	\$ 0.36
Whitetail Addiction	\$ 0.32

Management Implications

Mineral mixtures with a high NaCl (>90%) content are most suitable for attracting white-tailed deer to camera sites for surveying population characteristics.

Trace mineral mixtures tend to be most attractive to white-tailed deer during late spring and early summer months (May – June)

