Chronic Wasting Disease in North Carolina

What it means for our future

Moriah Boggess, Deer Biologist
Hemorrhagic Disease
EHD & Blue Tongue

• Virus
• Endemic to the Southeast
• Cyclical outbreaks
• Some deer survive with immunity
• Populations rebound quickly

CWD

• Prion
• Spreading across country
• Constant drain on population
• 100% mortality rate
• Populations slowly decline
Infectious Agent - Prion\textsuperscript{CWD}

- No treatment
- Nonliving material – cannot be killed
- Persists in environment
- Accumulates over time on landscape
What Does CWD Look Like?

Mike Hopper, KDWP

Infection  
Symptom onset  
Death

16  12  8  4  Months

Mike Hopper, KDWP
Why Does CWD Matter?

- CWD is a slow, permanent disease
- CWD prevalence will increase
- Deer lifespans will be shortened
- Future deer populations will change
Future Population Effects

- Average fawn recruitment rate ~50%
- It takes at least 2 years for a doe to replace herself (minimum)
- Shorter lifespan = less reproduction
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NC Adult Deer Age Structure

Age

- 1.5: 29%, Buck (n=5353) 22%, Doe (n=4547)
- 2.5: 39%, Buck (n=5353) 33%, Doe (n=4547)
- 3.5+: 32%, Buck (n=5353) 45%, Doe (n=4547)
CWD in North Carolina

- NC has surveilled for CWD since 1999

- Detected in Northwestern zone in 2022
  - 9 additional detections during 2022-23 season, including Cumberland County
CWD Positive Deer Detections

Counties
- Cumberland 1
- Stokes 1
- Surry 5
- Wilkes 1
- Yadkin 2

**as of 05/15/23**
Cumberland County CWD Detection

- Harvested during rifle season
- Tested by Cervid Health Cooperator taxidermist
- DNA confirmation matched
- First detection in coastal plain
What Can Be Done?

1. Know where it is
   • Test, test, test

2. Don’t give it a ride!
   • Live deer
   • Dead deer

3. Slow transmission rates
   • Avoid unnecessarily congregating deer