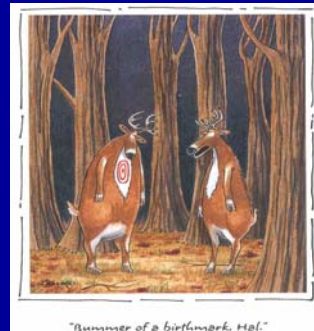


Chronic Wasting Disease Management in Wisconsin:

Lessons learned in an “enzootic” area that
started out hoping it was a “newly detected” area

Julie Langenberg
Wisconsin Department of
Natural Resources



Wisconsin's CWD Timeline

- 3 index cases (all bucks) were identified in 2002
- 6 hunting seasons of effort to control CWD by reducing the deer population
- Currently significant pressure to show progress (Legislative Audit, 2006)



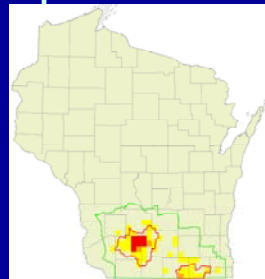
Wisconsin's Initial CWD Management Goals

- Limiting the spread of the disease from the known infected areas
- Eradicating CWD in the known infected areas
- Expanding surveillance of both wild and captive cervid populations
- Increasing scientific knowledge on CWD



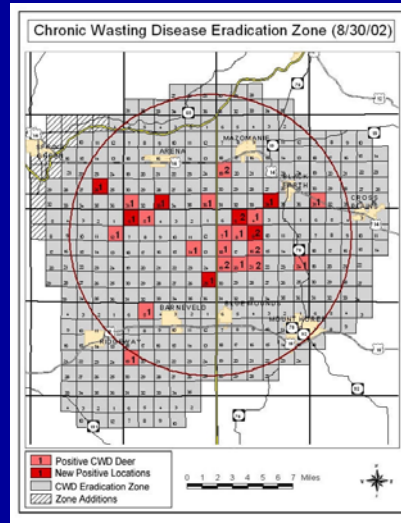
Wisconsin: the large scale deer population reduction experiment

- Deer population reduction
 - Techniques: hunters, sharpshooters, etc.
 - Large and small scale (“hot spots”)
 - Goals:
 - Reduce # of CWD infected deer
 - Reduce # of susceptibles
 - Increase population turnover
 - Reduce transmission opportunities
 - Reduce environmental contamination



Where Wisconsin Started

- **Disease Eradication Zones**
 - Known infected areas
 - Initially extended 4-5 miles from positives
 - Goal was to drastically reduce the deer population (“as close to zero as possible”, less than 5 deer/mi² of deer range)
- **Herd Reduction Zone**
 - Buffer area surrounding DEZs
 - Extends approximately 40 miles from center of infected areas
 - Goal has been to significantly reduce the deer population (10 deer/mi² of deer range)

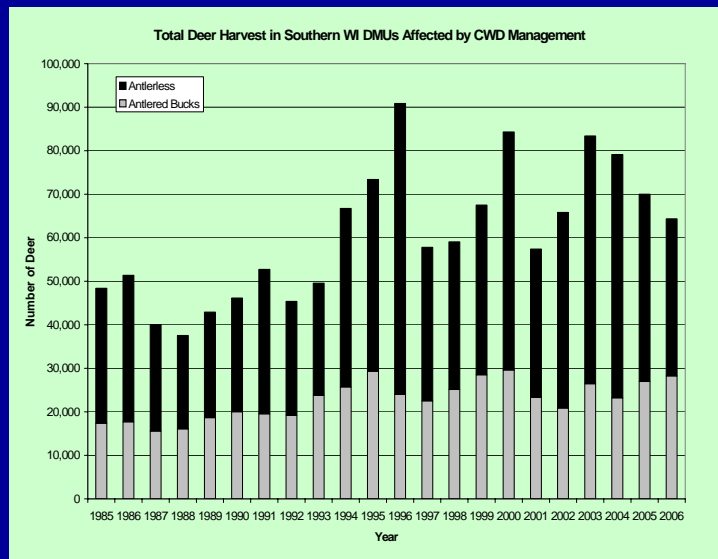


CWD Control: Deer Herd Reduction through Hunter Effort

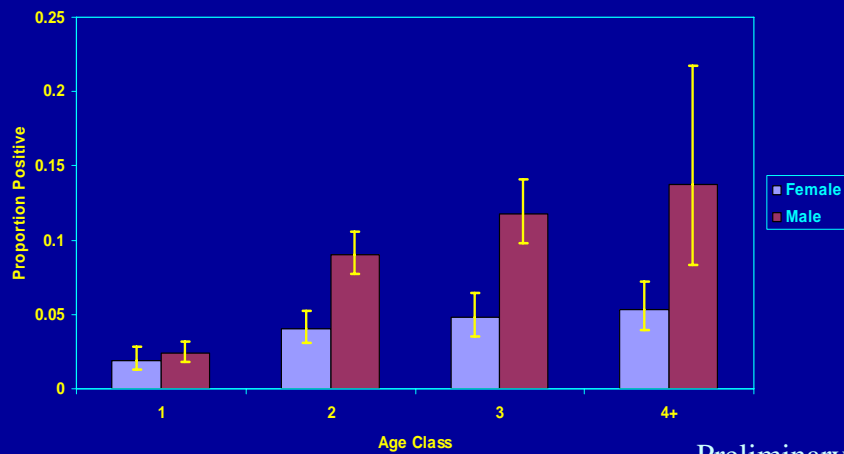
- Hunting has been the major tool for deer removal.
- Extended seasons, “unlimited tags”, free licenses for landowners, and financial incentives have been tried to increase hunting in CWD zones.
- Each Fall in WI, 5-600,000 hunters harvest 4-500,000 deer (removing approx. 1/3 of the deer population)



"The Stick": Earn-a-Buck

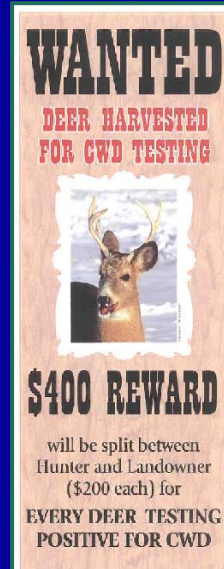


An Earn-a-Buck Consideration: The potential role of bucks in CWD Transmission?



“The Carrots”: CWD Incentive/Reward Program

- \$400 reward for CWD-positive deer (split between hunter and landowner) and \$20 reward lottery for every deer harvested in a DEZ
- Most landowners were aware of the incentives, BUT incentives generally did not increase deer harvest, time spent hunting, or number of hunters allowed on land to hunt. (Based on 04-05 WDEZ Landowner Survey)



“The Carrots”: Additional Incentives

- Venison Pantry Donation Program: DNR has supported and paid for CWD test negative hunter harvested deer donated to food banks for low income citizens. (a popular program, but in 2006 may only have resulted in 1300 additional deer harvested out of total CWD zone harvest of 56,000)



Disposal of Unwanted Deer and Deer Parts in CWD Zones

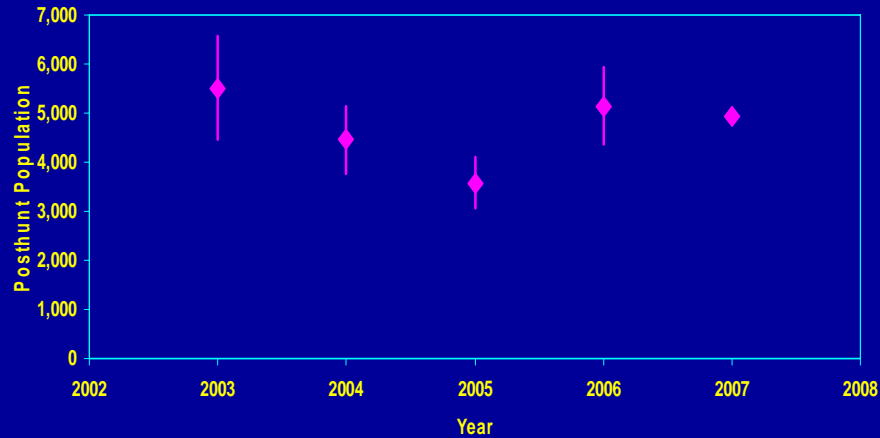
- Based on multiple disposal risk assessments, landfilling has been the preferred option
- “frost and toast” was done for many years
- Disposal costs avg. \$400,000/yr
- Legislation for indemnification of landfills/wastewater operations



WDEZ GUN SEASON STRUCTURE 2002-2006

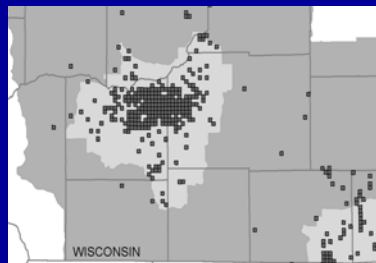
Year	Season Dates	Total Days	Season Regulations
2002	Oct 24- Jan 31	100	Earn-a-Buck All Season
2003	Oct 30- Jan 3	66	Earn-a-Buck All Season
2004	Oct 28- Jan 2	67	Earn-a-Buck All Season
2005	Oct 27- Nov 13 Nov 19- Jan 3	64	Earn-a-Buck: Early Season Only
2006	Oct 14-Oct 22 & Nov 18- Dec 10	32	No Earn-a-Buck

wDEZ Core Area Deer Population Estimates



Agency Sharpshooting

- Goals: remove infected deer and reduce deer populations in under-hunted and high prevalence areas (refuges), and peripheral “sparks”
- Sharpshooters are effective:
 - Remove more antlerless deer than hunters (79% vs. 52%)
 - More effective at removal of positive deer (17% vs. 1-2% of hunter-harvest)



CWD Control is not Just Culling Deer: Deer Feeding/Baiting Restrictions

- 2002: Emergency statewide ban on deer feeding and baiting
- 2003: Ban in all CWD zones and any county within a 10 mi. radius of wild or farm cases; volume and location restrictions in the rest of the state



CWD Control in Wisconsin Farmed Cervids

- 2002: mandatory CWD program: either monitoring of all dead adult deer or double fencing/herd sampling
- CWD identified to date on 7 farms (6 WT deer herds, 1 elk herd)
- Ongoing challenges: escapes (as many as 50 events/year), legal challenges by farms to CWD-related depopulation orders, etc.

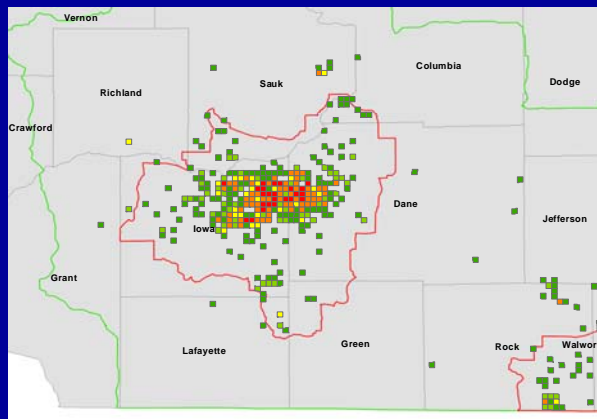


Wisconsin's CWD Control Program: Progress to Date?

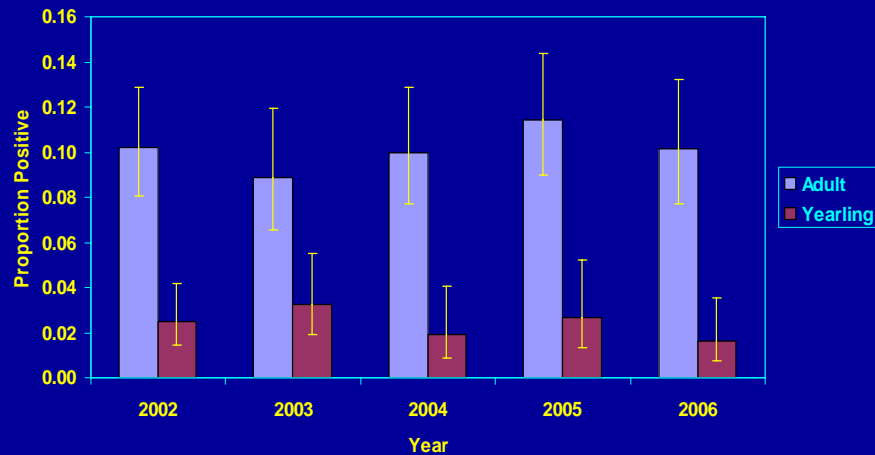


CWD in Wisconsin

- CWD has spread spatially in WI.
- Overall prevalence varies (up to 4-5% average in core areas)
- Western and eastern disease areas show 2 different patterns of CWD.

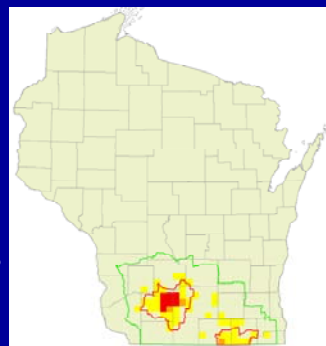


Prevalence in wDEZ Core Among Bucks 2002-2006



Wisconsin and CWD: key lessons 6 years out

- WI hunters and other key stakeholders are unwilling to harvest enough deer for significant population reduction.
- High programmatic costs (\$4-6million/yr) cannot be sustained.
 - ~50% is for surveillance
- Even with intense surveillance, it is extremely difficult to detect true distribution of disease and monitor prevalence.



Wisconsin's Current CWD Management Challenges: What does the state want?

- 65% of hunters think CWD should not be allowed to spread.
- **But** more than half are concerned that control efforts will harm deer populations and they do not support drastic herd reduction.
- Only 34% of hunters harvest 2+ deer in a season.



What's next for Wisconsin CWD management?

- Re-assessment of goals
 - Attempt containment of CWD to southern WI?
 - Work to limit the progression of CWD in the state? (including reducing statewide deer densities, total ban on baiting/feeding)





Thank you