Model Comparison No APR vs. APR

Dwyane Etter, PhD, Wildlife Research Specialist
Wildlife Division
July 16, 2020





Question: Within the experimental APR area (Ionia, Mecosta, Montcalm Counties), is there a difference in the proportion of the deer population that is infected with CWD with and without APR regulations?

 Used an existing (peer-reviewed) model developed for Montcalm County.

Model context

 Input data (deer abundance, sex/age composition and harvest estimates) provided by MDNR.



SCENARIO SETUP: NO APR VS. APR

How is APR reflected in the harvest patterns of the model-generated Montcalm County deer population?

Age-sex class harvest	MIDNE	R data	Model population data
male fawn harvest		700	774
male yearling harvest		2900	↓ 2019
male adult harvest		2700	2945
female fawn harvest		700	860
female yearling harvest		1400	1544
female adult harvest		1400	1909





SCENARIO RESULT: NO APR VS. APR

How does model-generated Montcalm County deer population sex and age composition change after APR is implemented?

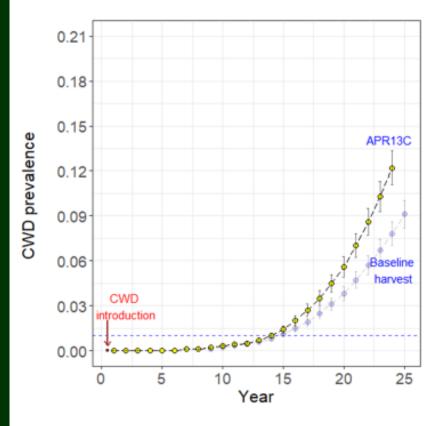
Population parameters	MIDNR estimates	MIOvPOP
Fawn proportion	0.32	0.35
Yearling proportion	0.25	0.23
Adult proportion	0.43	0.42
Female: male ratio	1.48	1.37





CWD PREVALENCE TRAJECTORY COMPARISONS: NO APR (BASELINE) VS. APR





Baseline harvest: Model trend with NO APR.

APR13C: Model trend with APR.

11/17



Departmental Responses to Proposed Amendments

Ashley Autenrieth, Deer Biologist
Chad Stewart, Deer Management Specialist
Wildlife Division
July 16, 2020



Amendment 1:

- Remove APRs on the deer combination regular tag except for restriction on Drummond Island, CWD APR Study Area, NW13, and UP CWD Core, which would stay the same
 - Departmental Position: Postpone until Phase II
 - Removal of APRs on the deer combination regular tag without following the APR Guidelines in areas that have received high levels of support would yield animosity
 - Discredits the Department's APR process
 - Potential transparency issue with late change





Amendment 2:

- Allow the same pre-baiting period for hunters participating in the Independence hunt as with the Liberty hunt
 - Departmental Position: OPPOSED
 - Liberty hunt is a 2-day hunt and the first hunt of the year with no concurrent seasons
 - Independence hunt is a 4-day season and overlaps archery season
 - Potential conflicts for archery hunters not eligible to use bait

Amendment 3:

- Removal of Hunter's Choice in the UP
 - Departmental Position: Postpone until Phase II
 - Regulation was developed outside of Departmental process
 - Complaints do come in regarding confusion or desire to hunt two bucks without APRs on one tag
 - Likely has minimal impact as ~50% of UP hunters pursue bucks under a deer license
 - Neutral because Department is currently working on broader regulations including UP regulations

Amendment 4:

- Crossbows eligible for use in late archery in the UP
 - Departmental Position: Postpone until Phase II
 - Unlikely to yield population level impacts
 - Would simplify and expand opportunities
 - No differences in success rates between archery/crossbows
 - UP All archery success: Antlerless-5%, Antlered-22.5%
 - UP Crossbow success: Antlerless-5.5%, Antlered-24.4%
 - Neutral because Department is currently working on broader regulations including UP regulations

Amendment 5:

- Prohibit carcass movement from outside counties where the disease is detected
 - Departmental Position: OPPOSED
 - Current proposal based on surveillance and distribution of the disease
 - Director's authority



Amendment 6:

- No 4-point APR on restricted tag of combination license in 14 counties in the CWD Management Zone
 - Departmental Position: OPPOSED
 - Determined to not have impact on harvest tendencies of hunters
 - Increases complexity of proposed regulations
 - Some counties included in have not detected CWD despite intensive surveillance





Amendment 7:

- Allow unique opportunities for muzzleloaders on public lands
 - Departmental Position: OPPOSED
 - Muzzleloaders will still have a defined season in NLP and UP in current proposal
 - In the SLP, <5% of land is publicly owned
 - Muzzleloaders still able to be used on these lands
 - Though participation and harvest increased in 19 county area where firearms are currently allowed during the muzzleloader season, not so much of an increase to show concerns with overcrowding or pressure on herd



Resolution 1:

- That DNR/APR Guidelines not be updated pending MAPR study is concluded
 - Departmental Position: OPPOSED
 - Department undertook this action because of a previous NRC resolution asking to move forward with this revision
 - Joint decision brought forward with multiple group representation
 - Currently no active APR proposals being considered; unlikely to consider proposals prior to MAPR study being concluded

Thank You

www.michigan.gov/dnr

