DEER ADVISORY COMMITTEE MEETING

2/7/2014 Mead Wildlife Area

Introductions – Chairman Kevin Wallenfang thanked the Committee for their work and attendance. This is the first meeting under the new membership format. Committee member introductions were made and each provided a brief background of their involvement with deer issues. Membership included: DNR Customer Service, GLIFWC, Wisconsin Wildlife Federation, DNR Wildlife Damage, Conservation Congress, DNR Law Enforcement, DNR Big Game Section, DNR Science Services, U.S. Forest Service (Chequamegon-Nicolet National Forest), DNR Division of Forestry, and representation from each DNR District. Additional members not in attendance included Wisconsin Bowhunters Association. Guests in attendance included: DNR Wildlife Division Director, DNR Ungulate Research Scientist, Ph.D. student with UW-Madison, retired DNR, DNR Big Game Section Chief/Deer Management Assistance Program Coordinator, and a private citizen.

Deer Trustee Report (DTR) Implementation - Discussion directed by Kevin Wallenfang

Role of Science in Future Deer Management - Discussion directed by Tom Hauge, DNR Wildlife Mangement Bureau Director, and Robert Rolley, DNR Research Scientist

- Science will continue to inform deer management decisions; many public questions pertain to the use of science in future decision-making processes. Will increase public involvement.
- Current deer management system includes: deer management units (DMU), population goals, hunter surveys, deer population estimates, and variable quota system.
- DMUs were the basis of management decisions with areas based on similar habitat/land use. Each DMU had a numeric population goal developed through a public input process (ecological carrying capacity, social tolerance, maximum sustainable yield, hunter success and deer viewing, tribal harvest, and disease/herd health). Goals reviewed about every 3 years.
- Considerations in the development of antlerless quotas per DMU included: buck harvest density, age structure of the harvest, fawn:doe ratio, fall population density, public survey, over-winter population density, winter severity, rate of population change, population goal, expected buck harvest, antlerless bow harvest, and fall population prediction.
- Overview of DTR rule proposal included: move towards non-numeric unit goals (increase, decrease, stabilize the herd), gather public input through Deer Management Advisory Committees (DMAC), DMACs provide recommendations on quotas to the DNR and Natural Resource Board (NRB), county boundaries will delineate DMUs, continued use of Sex-Age-Kill model (SAK) but develop and incorporate new metrics (under development), continued 3-year review frequency, seek to improve decision metrics (agricultural damage, etc.), and continued final approval by DNR Secretary and Natural Resource Board (NRB).
- Future data collection: electronic deer registration (same data, new methods), expand and enhance current weather/landscape data collection (hunter surveys, Winter Severity Index [WSI], deer range/cover), and new metrics (underdevelopment).
- Future population estimates will include: county-based DMU estimates, testing of new methods, and citizen science opportunities (new statewide trail camera study, DMAP participation).

- SAK data will be converted to county estimates; 2014 will be a transition period. Retrospective county-based SAK data is under development.
- Currently working on ways to minimize biases associated with citizen science data collection.
- Challenges for DNR Science Services: developing new metrics and indices (social, human health, economic, etc.), time and resources to develop, timeframes for evaluating/understanding new metrics will vary, developing methods to estimate sex/age of harvest with electronic harvest registration, identifying electronic registration compliance, methods to deliver science/data to the public to promote an increased role, determining how science will be used to inform future decision-making processes, time/resources to adapt new methods to past data (retrospective county-based population growth rates by land type, etc.).
- Biological and social factors were and will continue to be used in establishing unit objectives.
- There will be a transition period in developing public comfort with new system.
- Tribal harvest is not reported and thus violates on of the major assumptions of SAK for reservations; the SAK model does not work on reservations.

Deer Trustee Rule Implementation - Discussion directed by Eric Lobner, DNR Southern District Wildlife Supervisor

- County boundaries will designate DMU boundaries, with exceptions. Management Zone boundaries (Northern Forest, Central Forest, Central Farmland, and Southern Farmland) were designated by habitat/land use type and still are, but follow county boundaries in most cases as well.
- In 2014, archery and gun license will include one statewide buck tag and one antlerless tag valid for any Central Farmland or Southern Farmland Zone units only. Bonus antlerless tags, where available, will be unit, land type (public or private) and Management Zone specific. In 2015, all antlerless harvest tags (free antlerless and bonus antlerless tags) will be unit, land type, and Management Zone specific. Additional antlerless tags, if available, will be sold on a first-come, first-serve basis. Free and additional antlerless tags will not be weapon-specific. The current license issuance system (ALIS) will not allow the issuance of land type-specific tags in 2014.
- Deer season structure (2014 and beyond): the Holiday Hunt will only be in Southern Farmland Zone units and was shortened by 3 days (ends January 1st each year), the 4-day December antlerless hunt will occur in Central Farmland Zone units only, and the 9-day gun deer season will continue to be statewide (no change).
- The CWD-affected area will be county-based and will include counties where a CWD-positive test was found or counties within 10 miles of where a CWD-positive deer was found.
- With electronic registration, new methods are needed to collect land type (public/private) or Management Zone information with buck harvest; this information will be required with the purchase of antlerless tags. Antlerless tags will have a unique identification code.
- Recommendation options available for DMACs include: one or more antlerless deer per bonus buck (one bonus buck max per hunter and 3 bucks max per hunter per year; bonus buck limited to Southern Farmland Zone units only), implement a 4-day gun deer hunt in disease areas by emergency rule only (counties that don't already have it), and/or provide additional free antlerless tags with the purchase of a deer hunting license. Implementation of these options may result in a complex checker board-pattern season structure statewide. DMAC development will occur in summer of 2014. DMACs will begin to make recommendations for the 2015 season.

- 2014 population objectives will be *stabilize* in the Central and Southern Farmland Zone units and *increase* in Northern and Central Forest Zone units.
- In Central and Southern Farmland Zone units, agriculture damage permits or DMAP antlerless tags may be issued to provide more refined area-specific management (areas where forest regeneration is limited by over-browsing, etc.).
- DMU metro subunits will be retained although population data will not be separately collected for subunits. Metro subunits will have a longer harvest season structure, but separate quotas/permits will not be issued.

Deer Management Advisory Committee - Discussion directed by Tom Hauge

- The local DNR biologist will provide herd data and analysis to the county committees (biological and social factors). The committees will provide quota and herd objective recommendations for consideration by the Wildlife Policy Team and approval by the DNR Secretary. Final approval will be made by the Natural Resource Board (NRB).
- A Conservation Congress member will act as Chair for each committee.
- Proposed committee membership may include: agriculture, forestry, tourism, transportation, urban, tribal, and local sportsman groups. The majority of committee members must have purchased a deer hunting license in 7 of past 10 years. Membership may vary by county.
- There may be a few counties with some tribal representation, but it is unlikely that every committee would have such representation. Tribal representation refers to all tribes, not only Ojibwe tribes.
- There is a court-ordered process for consulting and attempting to develop consensus with tribes regarding deer quota recommendations. After quota recommendations are developed by committees, recommendations will be provided to the tribes for review

Electronic Registration - Discussion directed by Kevin Wallenfang

- Electronic registration is used to report turkey, goose, wolf and other harvest in Wisconsin and is expected to work well with deer harvest registration. A committee has been meeting to design future registration options.
- Collection of age/CWD samples: considering a pilot to work with meat processors to save heads for data collection (currently done in Pennsylvania - 33 biologist teams, 400 meat lockers, deer tags collect pertinent harvest information and are attached to deer heads). Bias may be associated with data: 1) miss taxidermy heads which may underrepresent older bucks (not believed to be a major bias in Pennsylvania as they use trends, not actual population estimates), and/or 2) people who home process may register deer at a different rate than those who use meat lockers (not believed to be a major bias in Pennsylvania either).
- Registration compliance is low in Pennsylvania and highly variable (30-40%); registration is mandatory but the state does not prosecute violators. Must estimate compliance rate annually as it does change from year to year. There are compliance issues with both in-person and electronic registration. Through the collection of heads/tags at meat lockers, registration compliance rate may be estimated (crosscheck with electronic system). Harvest is estimated with an adjustment of compliance rate in Pennsylvania. Compliance is likely to vary by county. Additional time for DNR Science Services was recommended to develop data through electronic registration.
- Currently developing a pilot study for 2014 to test compliance rate.

- There are 4 tribal reservations that are separate DMUs and not part of any county DMU. County-based quota establishments apply to county, not to reservation DMUs. Currently developing specific details regarding harvest registration with non-tribal lands in reservations, how quotas are set on reservations, and tribal requirements for registering deer. Will work with GLIFWC to develop a protocol - recommended that tribal registration be by reservation DMU, not by a county DMU. Tribes register off-reservation deer harvest by county and the former DMUs, and we should expect no change in 2014.
- GLIFWC biologist Jonathan Gilbert suggested that the 2013 tribal antlerless deer harvest will be below the 15% threshold for all counties in the Ceded Territory, thus no declaration or antlerless deer quotas will be required for the 2014 season. Will discuss the process for the 2015 season in the future.

Deer Metrics Oversight Team - Discussion directed by Robert Rolley

- Karl Martin, DNR Science Services, is the metric team leader. The team held the first meeting in early February. Future meetings will include GLIFWC as recommended by the DTR process.
- Working to develop sub-teams (forestry, agriculture, population, herd health, vehicle-collision) for developing new metrics. Committee members will be asked to participate at various levels of development. Cross-team work will be essential.
- New metrics may require pilot studies. Some metrics may require many years for developing and understanding data.

Deer Management Assistance Program (DMAP) - Discussion directed by Bob Nack, DNR Big Game Section Chief/DMAP Program Coordinator

- The DMAP program is currently under development. The program will focus on deer but the habitat management recommendations will be applicable for improving habitat for other wildlife species. Department staff will work with landowners to establish achievable goals.
- Program enrollment is a 3-tiered system varying by property acreage and enrollment fee.
- Currently developing an applicant database and informational materials.
- Limited program implementation beginning in 2014; identify and fix problems and to provide a high-quality program to those enrolled. Provide a month-long enrollment period in spring. No penalties initially for not meeting program requirements (management plan goals).
- Working with DNR Customer Services to develop DMAP antlerless tag issuance (half-price tags). DMAP Tags will be property/cooperative-specific and likely in-addition to the regular antlerless quota (like agriculture damage permits). Landowners/cooperators will be issued a DMAP account number, an enrollment fee will be posted to their account which they can pay electronically, DNR staff will conduct a site visit and provide management recommendations for tag issuance, landowners/cooperators may purchase tags electronically through their account or through a local license vendor (using their DMAP identification number). DMAP tags will be available for sale in the ALIS system starting in 2016.
- DMAP antlerless tags will most likely be in-addition to the regular quota tags. They will most likely be treated like agriculture damage tags. This is inconsistent with previous conversations with GLIFWC and warrants further discussion.
- Enrollees will be asked to collect biological information (metrics under development).

- Currently developing a DMAC Advisory Committee.
- Currently developing a public land option for enrollment (eligible starting in 2014).

Quota Setting Timeline - Discussion directed by Kevin Wallenfang

- A timeline for the 2014 quota setting process was provided to the Committee (NRB quota approval in May).
- An additional DAC meeting may be useful to discuss metrics, etc., at various points in this timeline.
- Robert Rolley and Kevin Wallenfang will meet with local wildlife biologist staff to discuss quota setting in mid-February.
- Herd Status meetings will occur on the same day as Spring Hearings

2013 Deer Season Review - Discussion directed by Robert Rolley, DNR Research Scientist

2013 Deer Season Review

- 2013 statewide buck harvest decreased 14% and antlerless decreased 4% from 2012 harvest.
- A summary of buck and antlerless harvest by region, change in total buck harvest by county 2012-13, percent change in total antlerless harvest 2012-13, and change in harvest by season type 2012-13, were provided.
- Hunters reported seeing more deer in 2013 than in previous 4 years; factors may include more snow cover or more hunters in woods later in the season (numbers are preliminary).
- Buck harvest rate lower in Northern Forest and Eastern Farmland (2012 was higher than 2011).
- History shows that we can expect a 15% decrease in buck harvest with a later season start; in 2013, the 9-day gun deer season was the latest opener possible and a week later than 2012.
- Aging data provides information on buck survival rates, calculation of sex ratios, and recruitment rates. In 2013, biologists aged fewer bucks (~12,000, typically 15,000, although effort was good).
- Long-term trend (1960-present) - percent mature bucks in harvest increasing in Northern Forest and Farmland regions; percent yearling bucks in harvest decreasing slightly in Northern Forest and slightly increase in Eastern Farmland, Western Farmland, and Southern Farmland (age distribution is variable across regions); percent yearling does in harvest was below long-term average in Central Forest and declining in Eastern, Western, and Southern Farmland regions over past several years. Reproduction has decreased and fawn mortality has increased in Farmland regions. The spatial distribution of deer is lower in the Northern Forest than in the Farmland regions (need more data to interpret).

Fawn:Doe Ratio Analysis

- Fawn:doe ratios (F:D) developed through Summer Deer Observation Survey (SDO) and Operation Deer Watch (ODW).
- *Summer Deer Observation Survey*: 2013 observations (collected by department staff) were lower in all regions than 2012 (likely due to less local effort/emphasis and that fewer deer were seen per effort.

- *Operation Deer Watch*: program began in 2010 to collect observation data from the public online. In 2013, a mailing was sent out to boost participation (number of observations increased by 10,000).
- In 2013, ODW reported considerable more observations than SDO. Committee concerns include: should SDO and ODW be equally weighted, would local managers have additional information regarding the reliability of SDO, does one survey provide more reliable data than the other (i.e., agency personnel may be more likely to conduct observations using binoculars as many agency vehicles maintain a pair for use), ODW provides more data so is it potentially more reliable (?), are observation data useful for inclusion with SAK, and are SDO data biased towards the work schedules of agency personnel. One recommendation is to provide more weight to SDO as done in previous years. **Committee agreed to combine observation data from OWD and SDO which gives more weight to the survey with more observations. Reemphasize to agency staff/public that specific protocol/criteria exist for collecting data.**
- For 2014, will use pooled F:D ratios for developing post-hunt population density per square mile of deer range. In past years the Committee has made adjustments to get conservative (lowered) population estimates. **Committee agreed that no additional changes were needed.**
- Average percent of yearlings with forked antlers is about 50% and 80% for Northern Forest and Farmland regions, respectively. Considerable variation exists within regions as well as spatial variation. The trend in the Northern Forest is decreasing similar to F:D ratio; need a better understanding of this and changes in forest age structure. May use yearling antler development as a future metric.
- For 2014, using current DMU structure to develop deer population estimates/data but it will be presented by county (new DMU structure).
- To convert current DMU overwinter deer population density (per square mile of deer range) to county-based estimates, a matrix of deer range by DMU/county and population estimates was developed, and retrospective county-based population estimates were estimated.
- Other Advisory Committees (Bear, Furbearer) minimize annual variation in population estimates by using a three-year running average (to get a bigger picture of the population). This was done with deer data and presented to the Committee for an example county and by forest and farmland region. DNR Science Services recommends that this is how deer population data should be estimated in the future. **The Committee agrees to develop annual deer population estimates using the three-year average method.**
- Not all SAK data is convertible from a DMU-level to county-based estimates (season framework, antlerless or bonus permit levels, harvest success rates, etc., are all DMU-specific). In 2014, it will be necessary to provide less information than previous years. Harvest and population estimates can be presented as graphs, there is only one year of county-specific age data, and numerical unit-specific population goals will no longer exist. Because of the short timeframe, the creation of a full SAK print-out is not possible for each county. **The Committee agrees that it is not possible to provide the same harvest and population information as we have in the past.**
- The quota setting process for developing antlerless gun quota reference value includes; winter severity index, rates of population change, fall population prediction, population goal, expected buck harvest, and expected antlerless bow harvest. This process will need to be rebuilt and will take time to convert it to a usable system. Will also convert unit-specific permit harvest relationships to counties. It will take time to understand the relationship between total permits

issued and antlerless gun harvest. We do not currently have average success rates for bow hunters (bonus permit success rate is unknown). DNR Science Services will continue to work on developing these processes/metrics over time and the Committee can re-address these issues when more information is available.

- Finalized county-based population estimates can be available in early March (following meeting with local biologists). The DAC will discuss final population estimates on March 3 (conference call).

2013 Chronic Wasting Disease (CWD) Update - Discussion directed by Robert Rolley

- Several new positive tests detected statewide in 2013; sampled 6,566 deer, 5 new positive tests outside of the CWD Management Zone (MZ).
- Adams County had a second positive; 250 deer tested.
- Juneau County had no new positives; 86 deer tested within 10-mile radius of previous positive.
- Portage County had two new positives; 247 deer tested.
- Washburn County had no new positives; 341 deer tested.
- The West Central District will likely hold a public meeting in Portage County pertaining to CWD.
- With the 2014 bonus antlerless tag fee increase, $5 of each bonus antlerless tags sold in CWD MZ will be allocated for CWD testing.
- The Committee will discuss the continued spread of CWD in WI and the information will be shared with the public. "Human health" should not be misconstrued as "CWD".

Winter Severity Index (WSI) - Discussion directed by guest Dan Storm, DNR Research Scientist. Data current as of Feb. 7th, 2014:

- Average current WSIs are 76 and 56 for northern and southern portions of northern Wisconsin, respectively. There is considerable variation across the region.
- For deer mortality project study animals there have currently been no unordinary predation events (3 total radio-collared animals detected).
- WSI data is available on DNR website, a press release was developed regarding winter severity, and a new winter deer feeding document was developed and placed on the DNR website.
- To date, no Committee member has confirmed reports of starving deer this winter, although Committee members have received unconfirmed reports of dead deer that froze to death.

Deer Research Projects - Discussion directed by guest Dan Storm, DNR Research Scientist

- 2014 deer captures to date; eastern study area (19 buck fawns, 15 yearlings, 4 2.5-year-olds, 15 doe fawns); northern study area (5 buck fawns, 3 yearlings, 11 2.5-year-olds, 7 doe fawns). Severe weather has affected capture efforts and adjustments are being made.
- A pilot study was conducted to determine if usable biological data could be obtained from road-killed deer; worked with contractors to access carcasses and concluded that data was usable. In 2014, will provide tags to contractors to record pertinent location information (affix to deer), and will provide $5 per usable deer. Potential exists to develop this project at a larger scale (new metrics). Sample collection will be in February-April; if >55-degrees F carcasses degrade quickly. In pilot, processed carcasses 1-2 times per week (based on contractors' schedules).

Ideally, would collect carcass samples in January (carcasses are frozen) through spring to get full picture of deer body condition over time.

Additional Comments - Discussion directed by Kevin Wallenfang

Conservation Congress - If the future focus is on deer population trends, the information provided today by DNR Science Service will be useful. Trend data will be more agreeable with the public whereas specific population numbers are viewed with greater skepticism. Suggested providing this information to public as soon as available.

U.S. Forest Service - Currently developing timber sales to create early successional habitat improvements, and a study to investigate aspen harvest/management. Harvests have been delayed through court litigation during the past 10 years; this is beginning to turn around.

Next Meeting: To be announced.