## Midwest Deer and Wild Turkey Study Group Meeting Camp Grafton, Devils Lake, North Dakota. August 22-25, 2010 Notes by Robert E. Rolley

The meeting was held at Camp Grafton a North Dakota National Guard training facility. Camp Grafton has been used by the military since the mid 1800s when it the island was used as a source of construction material for a nearby fort.

North Dakota has a human population of about 650,000 and has one of the smallest fish and wildlife departments. North Dakota is still experiencing growth in hunting license sales. Deer populations were reduced due to 2 severe winters but appear to be on the upswing. The state agency has tried for 3 years in a row to enact a ban on baiting and feeding of deer but these efforts have not been successful yet. North Dakota has had it first case of CWD just over the border from South Dakota. They have enacted a baiting ban for the deer management unit where the CWD+ deer was collected.

History of Devils Lake. Randy Hiltner. North Dakota Game and Fish. The Devils Lake Basin is a 3,810-square-mile closed basin in the Red River Basin, in North Dakota. At current lake levels there is no outlet. Lake levels have fluctuated considerably during the last 150 years, from 1,401 feet above sea level (asl) in 1940 to 1,451 feet asl in 2010. If the lake continues to rise to 1,459 feet it would spill over into the Sheyenne River (a tributary of the Red River). The lake as come up 29 feet since 1993. Flooding that began in the 1990's has destroyed numerous homes and businesses. Over \$450 million dollars has been spent moving roads and power lines, and building dikes. A small man-made outlet has been constructed to allow water to flow into the Sheyenne River. Devils Lake provides approximately million hours of fishing effort per year. The main fish species are walleye, perch, white bass, and northern pike. Approximately 40% of users are non-residents. The lake is slightly saline and is highly productive. The primary food resource is fresh water shrimp.

Wing-Tuttle White-tailed Deer Study. Bill Jenson. North Dakota Game and Fish. The primary objectives of the study are to estimate fawn recruitment and hunter harvest rates of does. Secondary objectives include estimating sightability of deer during fixed-wing aerial surveys, seasonal movements of does, and potential for habitat improvement. Obtained permission to capture deer from 86 of 157 landowners. Used Quicksilver helicopter capture to collar 50 deer in 1 day. Experienced 2 mortalities shortly after capture. Area has poor habitat quality and 2 severe winters in a row have reduced deer densities. Current density is about 5 deer/sq. mile. Number of deer counted during aerial surveys declined 30% from January to March in 1 winter. Have done lots of education of locals that it is OK to shoot collared deer.

White-tailed Deer Research on the Northern Great Plains. Jon Jenks. South Dakota State University. Assessing factors that influence whether deer are obligate or conditional migrates or residents. Also assessing effect of decline in CRP on fawn survival. Numerous studies across Minnesota, South Dakota, and North Dakota. A total of 276 adult does were collared; 42% were obligate migrators, 38% were residents, and

20% were conditional migrators. Summer and winter home ranges increased from east to west as did migration distance. The proportion of deer that were residents was associated with amount of forest cover (more forests = higher proportion of residents and lower proportion of obligate migrants). The proportion of conditional migrators that migrated was related to winter severity, a higher proportion migrated during severe winters. Adult female survival tended to be high (~75-80%). During a 3 year study, fawn survival declined as CRP was converted to wheat. Coyote predation was primary cause of mortality. Fawns used CRP fields in early summer until corn grew >85 cm in height then followed does into corn. CRP fields provided better thermal cover than did wheat fields. Maternal care and defense was greater in year with more CRP.

Corridors of Diversity- Riparian Areas and Their Importance to Wildlife on the Northern Great Plains. Jared McJunkin. National Wild Turkey Federation. Riparian areas are important habitats for wild turkeys and other wildlife in the Northern Great Plains. Cottonwood trees are aging/dying. Recruitment of cottonwoods is hindered by lack of flooding which creates bare soil. Exotics are taking over many riparian areas. NWTF is working with numerous partners to remove exotics and restore native trees. The partners are working cooperatively to improve the quality of riparian habitat on more than 90,000 acres in North Dakota, South Dakota, Montana and Wyoming.

Parasites and Diseases of Deer and Turkeys in the Northern Great Plains. Dan Grove, North Dakota Game and Fish. North Dakota has approximately 10 year cycle of EHD. Ranchers are concerned that deer feeding in hay may transmit calf scours, but mostly a cattle management issue. Deer can die from grain overload, 2 quarts of grain is enough to be fatal. First CWD+ deer found in North Dakota, 2 year old buck, Sioux County, 150 miles from nearest South Dakota positive. The area has low deer density (3 mule deer and 5 white-tailed deer/sq. mile). Will collect samples this fall/winter to estimate prevalence in area.

**Baiting and Feeding Resolution**. Iowa attempted to ban feeding of deer and wild turkeys last year but legislation failed, already illegal to bait. North Dakota prepared a fact sheet on baiting and feeding during last legislative session. The study group reviewed a draft resolution that outlines our concerns related primarily to disease transmission. The group approved submitting the resolution to the Midwest directors.

## **Deer Status Reports**

**South Dakota**. Statewide deer harvest in 2009 was 87,350, down 5% from 2008 (~70,000 WTD and 17,000 MD). In much of the state attempting to reduce populations, issued some triple tags in both east and west river portions of the state. In Black Hills deer numbers are down and are reducing tag numbers. Last winter was severe and about \$1 million in deer damage to hay stores occurred. Legislature passed bill granting free deer licenses to landowners. About 2,000 deer donated to Sportsmen Against Hunger. Established a web site to try to connect hunters with farmers experiencing deer damage. Research on fawn survival in Black Hills completed, estimating sightability of deer during fixed-wing surveys, studying deer deterrents. Will assist North Dakota with

CWD sampling. TB positive cow in southeast part of state, believe to be associated with captive elk and fallow deer farm in Nebraska. Will be testing deer in that part of the state.

**Ohio.** Total deer harvest ~260,000, 4% higher than in 2008. Venison donation program doubled number of deer donated to ~2,400. Previously had to purchase \$24 either-sex permit before you could buy \$15 antlerless-only permit. Now able to buy \$15 antlerlessonly permit first. Detected deer ticks in Ohio for first time. The gun season has started the Monday after Thanksgiving. Considering changing opener to Saturday after Thanksgiving. On-line survey shows 60% support for change. ~3,000 bow hunters participate in bowhunter observation survey; data primarily used for monitoring furbearers but also used as a secondary index for deer. HuntOhioFarms.com is a webbased program to match hunters with landowners that have damage. Many hunters signed up in first year of pilot effort, few landowners signed up and most didn't want to contact hunters. Will expand program to 38 counties in southern and eastern Ohio. About 10,000 deer killed on out-of-season depredation permits issued to 1950 farms. Will begin using telecheck in 2011. TB has been discovered in 2 dairy herds near Indiana border. Moved muzzleloader season from December into January, set record muzzleloader harvest. Has been conducting FLIR study, results have been highly variable.

**North Dakota.** Statewide deer harvest in 2009 was ~83,900 (~74,800 WTD and 9,100 MD). Hunting success declined from usual 70% to 59% last year, due to winter kill the previous winter. Severe winter resulted in many depredation complaints. Number of archery hunters has almost doubled in last 10 years. Archery licenses are unlimited but gun licenses are restricted. Legislature authorized 12 year olds to hunt antlerless deer. Has small scale program to match hunters with landowners with chronic depredation problems; 500-600 hunters matched with 50-60 landowners. Landowner interest is lower this year perhaps due to fewer deer or past relationships formed through program. Uses deer sighted per hour of effort as an index of population trend among with winter aerial surveys in permanent survey blocks in each of 41 management units and information on deer-vehicle accidents.

**Nebraska.** Statewide deer harvest in 2009 was ~76,000 (~64,500 WTD and 11,600 MD, WTD 53% bucks, MD 77% bucks). Mean age of harvested bucks has been increasing for both species. In 2009 hunter access was limited by deep snow. Used telecheck outside of gun season. Will use earn-a-buck in 2 areas this year in the gun season only. Conducted a landowner survey with assistance of NASS in 2010; 85% of landowners said deer population was higher than 5 year ago. Nebraska has program where people can exchange deer, more people sign up wanting deer than willing to donate. Developing web-based program to match hunters with landowners, ~1,000 deer killed on depredation permits. Will lower price of antlerless permit to \$10. Hope to increase antlerless harvest by 10,000 in 2010, attempting to reduce population by 25% in 3 years in a part of the state. Mule deer have tested positive for brain worm in area of relatively high density, many showing clinical signs.

**Michigan.** Statewide harvest ~440,000, with 725,000 hunters. Success rate was lower due to abundance of standing corn. Liberalized crossbow regulations in 2009, hunters 12 years old and older can use during firearms seasons, anyone 50 years old and older could use a crossbow in the archery season, and in Southern Michigan anyone 12 years old and older could use it in any season. Required a free crossbow stamp to gather name and address for survey purposed. About 57,000 hunters used a crossbow during the archery season and harvested about 25,000 deer. Looked at possibility of changing opening date of gun season to a Saturday, but 84% of surveyed hunters supported maintaining the November 15<sup>th</sup> opener. Proposed implementing antler point restrictions in the TB zone to try to increase antlerless harvest but commission applied point restrictions only to the combo license (combined archery and gun license). Can still purchase separate archery and gun licenses which are valid for any buck. Prevalence remains at ~2% of the population and has been largely unchanged during past 5 years. The CWD response plan called for banning baiting in the Lower Peninsula. No wild deer have tested positive. The 3 year baiting ban is due to expire. Anticipate intense public debate about lifting the ban. Starting a research study of deer management cooperatives to assess whether they are effective in meeting harvest objectives. Coops have enrolled 2,000-10,000 acres.

Kansas. Statewide deer harvest in 2009 was ~87,000 (~84,700 WTD and 2,300 MD, WTD 50% bucks, MD 86% bucks). Have stabilized or slightly reduced population since 1997. Deer-vehicle accidents remain a concern of some decision makers. High proportion of hunters are non-residents (16-17%). Harvest surveys are conducted online, getting a 50% response rate. Have required that the head be attached for transport of deer, but this conflicts with other states' requirements that deer from CWD zones be boned out. Have implemented a photo check where hunters can take a picture of deer and tag and submit to a website before transporting a boned-out animal. Legislature introduced a bill to require earn-a-buck for archery hunters only, did not pass. Shawnee Mission Park is a 3.5 sq. mile park in the Kansas City area. Deer density estimates of about 200 deer/sq. mile were obtained in 2007 and 2008 by road-based distance sampling. Some residents complained of severe damage to landscape ornamentals and gardens while plans to cull deer triggered protests from animal rights activists. White Buffalo Inc. was contracted with to conduct sharpshooting and they removed 313 deer in 3 nights. Spotlight surveys after sharpshooting estimated that 257 deer remained but helicopter surveys produced an estimate of about 100 deer. The difference between estimates produced by the different methods may be an area of further study. Approximately 2,700 free-ranging deer were tested for CWD in 2009, 15 tested positive for a total of 30 since 2005, all from the northwestern corner of the state.

**Iowa**. Statewide harvest ~136,500 deer, 64% antlerless. Buck harvest has declined for 5 years in a row and both hunters and farm bureau agree that deer densities are down. Eleven of 20 deer management units are estimated to be at or near goal. Most of the political pressure has come from the ag community, have reduced populations to mid-1990s levels in many areas. There is growing resistance to the recent levels of antlerless harvest. Are reducing numbers of antlerless permits in some areas. Iowa uses a combination of spotlight surveys, aerial surveys, roadkill indices, and bowhunter observation surveys for calibrating their population models. The spotlight survey covers

4,750 miles and 336 aerial survey transects were flown in winter 2009-10. Bowhunter surveys yielded 100,000 hours of observation. Models correlate best to spotlight surveys, components of the roadkill survey and portions of the bowhunter survey. The winter of 2009-10 had the 3rd highest snowfall on record for Iowa and there were some losses of deer in southern Iowa where deer densities were 70-100 deer/sq. mile and scattered losses in northwestern and north-central Iowa that were not associated with localized high deer densities. Will be increasing CWD surveillance in southcentral Iowa along the Missouri border. There is growing pressure to increase non-resident archery quotas. Loss of CRP is reducing quality of habitat in the heavily farmed regions of northwestern and north-central Iowa..

Illinois. Statewide harvest ~189,600 deer, 63% female. Use telecheck for most deer registration except where collecting CWD samples. 37 CWD positives in 2009 out of 2,400 animals tested from CWD zone (16 hunter harvested, 20 from sharpshooters, 1 suspect). Legislation passed to require over-the-counter sales of single either-sex archery permits to resident archers. Expanded the late season antlerless deer season from 3 days to a 7 day split season. The deer Task Force recommended using deer-vehicle accidents as an index of population level and as a basis for setting population goals. However, legislation changed the reporting threshold for accidents from \$500 to \$1,500 and there was a 28% drop in reported accidents. The value of deer-vehicle accident statistics as an index of program success is being questioned. Deer control permits were issued to 14 agencies in 6 counties in northern Illinois, 1,310 deer were removed by sharpshooters mostly from Cook and DuPage counties, yielding 51,300 pounds of venison donated to charities. There has been a report of EHD just south of Chicago near the Indiana border (30 dead deer reported). Illinois licenses outfitters.