

NOTES ON THE MEETING OF WHITE-TAILED DEER MANAGEMENT
SPECIALISTS IN THE GREAT LAKES AREA

Meetings

Meetings were held on February 14th, 15th and 17th., respectively, in Wisconsin and Michigan. Present on the Wisconsin meetings were:

Mr. L. W. Krefting, Regional Biologist, U.S. Fish and Wildlife Service.
 Mr. A. B. Erickson, Biologist, Minn. Conservation Department.
 Mr. V. Gunvalson, District Biologist, Minn. Conservation Department.
 Mr. M. H. Stenlund, " " " " "
 Mr. B. L. Dahlberg, " Wisconsin, " "
 Mr. A. de Vos, Biologist, Department of Lands & Forests, Ontario.

Present on the Michigan meetings were:

Mr. I. H. Bartlett, Deer Investigations, Michigan Conservation Dept.
 Mr. L. A. Davenport, Regional Wildlife Supervisor, Mich. Con. Dept.
 Several Game Managers and Deer Yard Investigators of that Department,
 Mr. B. L. Dahlberg and Mr. A. de Vos.

Field Trips

Field trips were made to a deer yard near Brule, Wis., to a deer yard near Mercer, Wis., and to the Flag yard in Wisconsin. The Michigan Conservation Department gave a demonstration with their "Snow Cat" in a deer yard near Watersmeet.

Topics Discussed at the Meetings

Aerial Censuses

Data were compared on type of aircraft used, altitude of censuses, airspeed, census strips, influence of weather conditions, most suitable time of the year for censuses, methods of recording, influence of cover, evaluation of aerial censuses.

Type of Aircraft. - Should be a high-wing monoplane with accommodation for 1 - 3 passengers and flaps for speed reduction. It should be useable with

sub-zero temperatures and be provided with a heater.

Altitude of Censuses - 300 - 500 feet, depending on the nature of the terrain.

Airspeed - Between 75 and 85 m.p.h. during the census; a higher speed when flying to and from census areas.

Census Strips - Minnesota uses a 1000 mile long strip all across the deer range. In case a limited area has to be censused, parallel strips, one mile apart, should be flown. Each observer should census a strip on his side of the plane of 1/4 or 1/2 mile in width, all depending on the amount of cover. Mr. Krefting recommended 1/8 mile wide census strip for moose censusing.

Weather Factors - The weather should not be too windy, as the deer will move around less. It should not be too cold for the same reason. Temperatures below 25-30° below are probably unsuitable. These low temperatures are too dangerous flying for certain aircraft and too uncomfortable for observers. Light overcast skies possibly give better visibility than clear skies. Censuses preferably should be taken after the first fall of sufficient snow and early in the season, because the deer don't yard as yet. Exceptionally high snow may not be suitable for censuses, because it may hinder the movements of deer. Crusty snow is not suitable.

Methods of Recording - Minnesota records on its 1000 mile strip flight at intervals of 15 minutes. While counting, the observer uses punches. In case strip counts of restricted areas are made, records should be made on turns between individual runs. Track concentrations can be recorded on census maps. Tallying of sexes seems to be impossible in case of deer, in case of moose it may be possible early in the season.

Influence of Cover - Cover definitely has its influence on the results of aerial censuses. Deer are more easily seen in open, burned-over stands and

concentrate more in stands which offer more cover.

Evaluation of Aerial Censuses - Aerial censuses in the Great Lakes area do not appear to be useful for accurate tallying of deer. They may be useful to show population trends (Minnesota states they are). Aerial observations are useful to find concentration areas and to map them. Aerial census work is still very much in the experimental stage. Number of individuals seen and track counts should be evaluated.

Ground Census Methods - Data were compared on some census methods now in use, such as the King method, track counting and shining.

The King Census Method - is used in areas up to 30,000 acres in size in Minnesota. Strips, 1 mile apart and up to 60 - 75 miles in length are censused by University students under the direction of the Department Staff. Erickson stated that it is useful only in open cover. Bartlett stated that the method is not accurate enough, according to him the King method was tried out in the George Reserve with disappointing results.

Track Counting in fresh snow from cars along roads has been tried by Wisconsin, Minnesota and Ontario. The results are again discouraging. The most one got out of it is the relative abundance of deer in certain areas. Only the tracks on one side of the road should be counted as deer have the habit of often following a road quite a ways. As deer have a tendency to walk into the wind, one should keep track of its direction. Notes should also be made of the topography along the road.

Shining - of deer in the fall is a good method to get information about sex and age ratios. It is used in Wisconsin.

Range Analysis Methods

The different range analysis methods which are in use were compared.

The Aldous Method - is used in Minnesota for deer range analysis and in Ontario for moose. The method consists of taking a percentage sample of the occurrence of browse and its degree of utilization in given areas. The sampling consists of surveying 1/100 acre plots at 10 chain intervals. The density of species and the degree of browsing on those species are entered on tally sheets as fractions. Although the results of this system can be statistically analyzed, no absolute counts are made in the field but estimations. In this respect this method is similar to the ones of Michigan and Wisconsin.

The Wisconsin method restricts itself to deer yard appraisal, although a forest damage survey has been made, giving statistical information. The appraisal is based on estimates of trained men, who cruise deer yards at random. Browse and browsing are entered on tally sheets under the headings: Availability to deer, Abundance of Growth, Current Browsing, Previous Browsing and Potential Browse.

The Michigan deer yard appraisal method is less detailed. As in case of Wisconsin, deer yards are appraised by deer yard investigators. Information on the range is entered under the headings: General food conditions (subheading - Types of food available and abundance) and Browsing (subheadings - Old and Current).

Palatability lists appear to vary between regions.

Population Trends

Minnesota stated that the deer population is going down this year. In Wisconsin and Michigan such is not the case. Wisconsin appears to have an increase.

Artificial Feeding

The many disadvantages of artificial feeding were discussed by Dahlberg and clearly shown by him in the field.

Range Management

Proper forest management may automatically result in proper range management. Cedar management has been practiced on a restricted and experimental basis in Wisconsin and Michigan. It may be possible that some kind of range management plan could be superimposed on a forest management plan with fruitful results on public owned lands. Wisconsin is experimenting with range management on a limited scale. Mr. Krefting is planning to start a management program in cooperation with the Lake States Experimental Station of the U. S. Forest Service.

Predator Relationships

The research work on timber wolves should be better correlated. Mr. Stenlund and Mr. de Vos are working on wolf movements, predation, weights and measurements. Mr. Thompson of the University of Wisconsin is working on wolf scats. Mr. Stebler of Michigan should be invited to write up his material.

Suggestions for a Future Meeting

It is planned to have a meeting of deer specialists of the Great Lakes Region in December 1949 in Madison, Wisconsin, one day ahead of time of the Midwest Wildlife Conference. The meeting will be an informal discussion. In order to make the meeting progress smoothly, it is suggested that discussion leaders will be in charge of different topics to be discussed. The following tentative program and discussion leaders were proposed:

Census Methods - discussion leader - Erickson. Progress reports on aerial

censuses made during the last winter. Suggestions for standardizing aerial census methods. Usefulness of a helicopter. Evaluation of tracks from the air. The use of 4-H conservation camps for census work. Possible evaluation of track counts along roads. Evaluation of Conservation officers reports on number of deer seen on an hourly basis for sex ratios, deer herd composition and population trends.

Range Management - discussion leaders - Krefting and Gunvalson.

Possibilities of cedar management, selective logging and other forest management practices for range management.

Herd Degeneration - discussion leader - Dahlberg.

Decreases in weights and sizes. Increase of diseases.

Range Appraisal - discussion leader - de Vos.

A comparison between the different range appraisal methods now in use. The possibility of using the same range appraisal method in the Great Lake States and Ontario to make a comparison of data possible.

Declining Deerherds - discussion leader - Bartlett.

A comparison between population trends in the different areas.

Probable reasons for population increases and decreases.

Deer Herd Management - discussion leader - Davenport.

An evaluation and comparison of the different methods of deerherd management.

Predator Relationships - discussion leaders - Stenlund and de Vos.

Findings on predator-prey relationships in the Great Lakes area.

Scatology.

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A. de Vos, Biologist,
Department of Lands & Forests.