

# PROCEDURE FOR INITIATION, EVALUATION, AND REVIEW OF MANDATORY QUALITY DEER MANAGEMENT PROPOSALS

#### INTRODUCTION:

Quality Deer Management (QDM) is an approach to deer management that requires restrictive buck harvests and sustained antlerless harvests to produce a more balanced sex ratio and populations in balance with available habitat. The Michigan Department of Natural Resources (MDNR) supports the voluntary implementation of these practices on private land. Recently several proposals, requesting mandatory implementation of QDM practices on larger land areas, have been presented to the Natural Resources Commission (NRC).

Three areas, South Fox Island, Drummond Island, and Deer Management Unit (DMU) 101, have been designated to have experimental antler restrictions to reduce pressure on yearling bucks. Each area proposal was unique in concept and desired regulations. The process of acting on each proposal was also undeveloped. The South Fox Island QDM proposal was part of a research project looking at population estimation techniques (recommended by the Wildlife Division and approved by the NRC with public comment). The Drummond Island QDM proposal focused only on bucks and was jointly developed with field management personnel (recommended by the Wildlife Division and approved by the NRC). The DMU 101 QDM proposal was proposed by a private individual directly to the NRC and approved at the same meeting.

In 1997, a proposal was submitted to create a new Deer Management Unit (DMU) with QDM guidelines for a portion of Clare County (78 square miles). The proposed mandatory rules were returned to the sponsors with the NRC requesting that the sponsors resubmit a modified proposal in 1998. The revised 1998 proposal was expanded to include all of DMU 107, covering 172 square miles in Clare County. To gauge public support for this proposal, the Wildlife Division worked with the sponsoring organization to survey a sample of the hunters and landowners in this area. Based on survey results, support for the proposal was judged insufficient by the Wildlife Division. The proposal failed for lack of support in NRC deliberations. A three-points-on-a-side antler point restriction was approved for DMU 107 for the 1999-2003 seasons.

Clearly, there is growing demand for mandatory QDM guidelines in localized areas and a need for a systematic process to evaluate these proposals. Keys to successful implementation of QDM-type regulations include four factors: a) willingness of the sponsoring parties to coordinate

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and support public information meetings, data collection, and evaluation, b) support of both landowners and hunters who would be affected, c) regulations that are understandable and enforceable, and d) a sufficient trial period for the regulation to impact deer herd structure. A process that accomplishes systematic evaluation based on the above four criteria and that measures public support will enable the best biological/social recommendations to be put into practice. Regulations affecting the taking of animals are enacted by the NRC.

In July 1998, the Wildlife Division formed a QDM working group to develop such a process. The group consisted of Wildlife Division staff, field biologists, and representatives of seven organizations (Appendix A). A copy of the guidelines used by the state of Georgia was used as the basic framework for consideration. The following criteria reflect adaptation of those guidelines to Michigan's resource conditions, social makeup, and regulation process. Regulations from this process should result in a population in balance with habitat, an older age structure of bucks, a desirable buck-to-doe ratio, and optimal fawn production and survival. Trophy management is not a goal of Quality Deer Management or the MDNR; the emphasis is on graduating a higher proportion of yearling bucks to the next age class.

# MDNR POSITION STATEMENT ON QUALITY DEER MANAGEMENT:

The MDNR supports the voluntary implementation of QDM practices on private lands in Michigan. Mandatory regulations should be imposed in a DMU only when it can be shown that a clear majority (66 percent) of hunters and landowners support implementation.

#### PROCEDURES:

#### *Areas to be considered:*

The smallest unit in deer management decision making is the DMU. These areas range from 67 square miles to 3,009 square miles. Criteria used to establish DMUs included deer population density, habitat conditions, crop/horticulture damage, land ownership patterns, safety concerns, and seasonal deer movement patterns. Attempts were also made to define boundaries that were easily identified by hunters. The number of DMUs also ensured that field staff and law enforcement personnel had time to develop and enforce regulations at the DMU level. Currently, there are approximately 165 DMUs administered by eight Wildlife Management Units.

Proposals to implement QDM-type regulations will be reviewed and considered for any DMU in the state, regardless of land ownership patterns. Proposals to realign DMU boundaries will be considered; however, these boundary changes must result in a DMU that is considered practical by the Wildlife Management Unit Supervisor. Additional features of the areas which could influence success of QDM programs (Appendix B) have been identified by Murphy (1997). Proposal sponsors should review that list of features and design their QDM proposals to minimize those factors that could make QDM more difficult to achieve.

### Project initiation:

Interested parties should initially contact the appropriate Wildlife Management Unit Supervisor responsible for implementing deer regulations in the proposed area (Appendix C). The Wildlife Management Unit Supervisor will provide information on the current guidelines and required forms for submitting QDM proposals. If an individual or organization contacts Wildlife Division personnel about a QDM proposal in an area, that person should be referred to the appropriate Wildlife Management Unit Supervisor.

These proposals will require substantial Division effort for one species in a relatively small geographic area. This has been a point of concern expressed by people and organizations interested in having adequate attention paid to management in other geographic areas and for other species. To ensure that the Wildlife Division is efficiently using personnel time and that sponsors are committed to successful implementation of mandatory QDM in a DMU, a "goodfaith," non-refundable contribution to support Wildlife Division administrative responses to the QDM proposal is required. A contribution of \$2,000 per proposal submission should be made out to the Wildlife Division Gift Account.

Wildlife Management Unit Supervisors will allot time for staff to work on no more than two new proposals per year in each Wildlife Division Management Unit. Proposals may be submitted annually. Each proposal submission will be handled as a new proposal, even if the proposal is resubmitted following an earlier rejection. Each resubmittal will require a contribution of \$2,000. If more than two proposals are received or multiple proposals are made for a single DMU in a single year, then the Management Unit Supervisor will select those proposals with the greatest potential for successful review (including public support) and implementation.

The first step in the process is to provide a draft proposal with a preliminary measure of support to the Wildlife Management Unit Supervisor. The proposal should contain a statement of purpose (what the proposal is intended to accomplish), proposed regulations, and proposed methods of evaluation.

The statement of purpose should include management objectives for both bucks and does (i.e., older buck age structure, sex ratio goals, antlerless harvest to meet population goals, etc.) as well as societal values (i.e., stewardship, education, etc.).

Proposed regulations must protect at least 50 percent of yearling bucks to be considered effective and measurable. In the Upper Peninsula, a "no-spike" rule would be recommended to meet this threshold, based on data from 1987-98. In the Northern Lower Peninsula (see Appendix D for area definition), a three-points-on-a-side rule would be needed to protect at least 50 percent of yearling bucks. To protect at least 50 percent of yearling bucks in the Southern Lower Peninsula, an antler point restriction rule would need to protect animals with less than four-points-on-a-side. These minimum standards are recommended for proposal sponsors to reduce complexity of regulations across geographic regions while still ensuring protection of yearling bucks for Quality Deer Management objectives.

The regulations will be in effect for a five-year period. Graduated or step-up regulations are not permitted (i.e., three-points-on-a-side for two years followed by four-points-on-a-side for the remaining three years). This requirement is to keep regulations as simple and understandable as possible for the affected parties. The Wildlife Division retains authority to set antlerless harvest quotas to maintain deer populations at appropriate levels in the DMU based on available biological information and input received from all stakeholders. Recognition of antlerless harvest as part of any QDM proposal is required.

The proposal will be evaluated for completeness and soundness by Wildlife Division staff, and a written critique will be given to the sponsoring party. Staff personnel will include the Wildlife Management Unit Supervisor and the District Law Enforcement Supervisor. It may be returned for improvement or clarification, or accepted for the next step, public notification.

The preliminary measure of support is either a) a petition of 100 supporting individuals (at least 50 people who have hunted in the affected area and at least 50 landowners of 40 acres or more in the affected area) or b) one organization with local ties to the affected area. Individuals or organizations can initiate proposals. Interested parties are encouraged to form an organization (or solicit an existing organization) to serve as the proposal sponsor, with identified leaders. This helps to publicize the sponsoring organization, making the dissemination and collection of information more efficient. This step should be completed two years prior to proposal implementation (October 1), allowing all of the subsequent steps to be completed in a timely manner.

If a proposal is rejected and the sponsoring organization (or individual) believes the Management Unit Supervisor did not give adequate consideration to the proposal before rejection, they may appeal the decision to the Wildlife Field Operations Supervisor for a second review. The Wildlife Field Operations Supervisor can utilize other staff at his/her discretion or request review by the biologists on the QDM working group.

The proposed regulation, once accepted, will be incorporated into the Hunting and Trapping Guide (and related guides such as the Antlerless Deer Application Guide) in the year prior to implementation. This Guide is printed in June; therefore, the final proposal must be completed by May 15. The Guide will announce the proposed regulation, proposal sponsor (with telephone number), location, and date of a local public meeting on the topic. A copy of the proposal will be distributed to Wildlife Division and Law Enforcement Division personnel for discussion at meetings and speaking opportunities.

The public meeting must be advertised in local media and occur at least ten months prior to proposal implementation (no later than December 1). Announcement of the meeting will also be included in MDNR press releases. Wildlife Division personnel will be involved in the public meeting and shall provide a balanced presentation on the positive and negative impacts of the proposal. Groups that have presented a mandatory QDM proposal to the NRC before October 1998 may bypass the steps of public meetings and public notification and move to Wildlife Management Unit Supervisor review of the proposal in anticipation of a survey in December.

In December of the year prior to proposal implementation, a formal mail survey will be conducted by the Wildlife Division to measure support for the proposal. A sample of landowners within the affected area and a sample of persons that deer hunt within the affected area will be selected to achieve a fair representation of the views concerning the proposal. The actual sample size necessary will be determined by Wildlife Division survey staff and will be based on the number and distribution of affected stakeholder populations.

The landowner sample will be obtained from county tax records. In counties with electronic databases, the Wildlife Division will obtain the necessary sample. In counties that cannot provide electronic files of landowners for sampling, the sponsoring organization will be required to obtain the landowner sample from county tax records for the Wildlife Division. The Wildlife Division survey staff will provide landowner-sampling methods, which will ensure acreage ownership patterns are reflected in the sample. Only landowners with acreage greater than or equal to the minimum acreage requirement for private land antlerless hunting licenses in the prior year will be included in the sample.

A random sample of hunters who hunted in the affected area in the previous year will be used as the sample of hunters. The sample of hunters will be obtained from the most recent Deer Hunter Survey (conducted annually by the Wildlife Division). In this survey, location of hunt is recorded as county, thus the hunter sample may include hunters of nearby areas that may not be affected by the regulation. These individuals will not be included in the response tally.

If the volume of proposals exceeds the Wildlife Division's ability to complete the survey process and analyze results, an independent third party (e.g., university) may be used to conduct the surveys.

A standardized survey will be developed for this purpose and include a question on the specific proposal. Response options to the question on the proposal will be "yes", "no", "undecided", and "don't care" (Appendix E). Additional questions regarding the respondent's background (hunting activity in affected area, age and sex, etc.) and opinions on related issues may be included. The sponsoring organization will have input to any changes made for the purpose of adapting the questionnaire to a particular proposed area. The name and address of contacted individuals will be kept confidential, but they may be subject to a Freedom of Information Act (FOIA) request.

To obtain the maximum response, a post card reminder will follow the first questionnaire mailing. A second questionnaire will be sent to those who have not responded within a reasonable period to the first questionnaire. A 50 percent response rate (number of returned surveys divided by the number of delivered surveys) will be considered the minimum acceptable response rate for each sample (landowners and hunters). The Wildlife Division will determine if non-response bias should be evaluated if the response rate is below 70 percent.

The percentage of support will be measured by dividing the number of "yes" responses by the sum of those responses indicating "yes," "no," or "undecided." People who indicate "don't care" or who do not answer the yes/no/undecided/don't care question will not be considered in the

tally. Support must be indicated by at least 66 percent of landowners and 66 percent of deer hunters to the question concerning the specific proposal.

The proposal for mandatory QDM regulations will be terminated if the survey fails to attain either of the following conditions: (1) a minimum 50 percent response rate for each of the landowner or hunter sample as described above; or (2) support by 66 percent of survey respondents in either the landowner or hunter sample as described above.

The survey results will be summarized and distributed by March 1. The Wildlife Division will include proposal recommendations as part of the April NRC meeting for discussion, with Commission action at the following NRC meeting in May. If approved, the regulation will be incorporated into the Hunting and Trapping Guide and implemented that fall. The NRC action will be included in a Department news release. If the NRC does not approve the proposed change, the sponsoring organization may address the reasons for rejection and resubmit the proposal at a later time.

# *Project duration:*

The proposed regulations will be in effect for five (5) years. The specific regulations, once implemented, cannot be changed for three (3) years. Petitions to drop the regulation can be submitted after year three (3). In response to such a petition, the original survey of support must be redone. A sponsor must agree to pay for redoing the survey of support, which will be conducted by the Wildlife Division. The new public opinion survey must show at least 66 percent support from each group (landowners and hunters) to keep regulations in place.

In the absence of any challenges, the Wildlife Division will survey landowners and hunters after the fourth year to measure support for the regulation and to determine the appropriate path to be taken after the fifth season. The Wildlife Division survey participants will be asked if the regulation should remain in place or be dropped. The same criteria will be used to interpret results.

# Evaluation of the effectiveness of the regulation change:

Evaluation must begin prior to the establishment of the regulation. During hunting seasons of the year prior to proposal implementation, the sponsor will be required to collect baseline information on herd age and sex structure. Evaluation of local area regulations will require intensive data collection and will be the burden of the sponsoring organization. A minimum of 100 bucks and 200 antierless deer (or all harvested antierless deer if expected antierless harvest is less than 200 animals) will be required for the year prior to season implementation and each year of the proposed regulation implementation. Deer checked at MDNR-operated check stations would be included in the sample to increase sample sizes for evaluation. A sample of this size is needed to assess whether the regulation is having the desired impact on herd age and sex structure. Details of data collection will be worked out cooperatively between the sponsoring organization and the Wildlife Division staff. Failure to collect the pre-regulation data (in the year prior to anticipated implementation) will halt the process until this requirement is satisfied.

Areas with limited antlerless harvest or regulations that bias or interfere with data collection may require alternative data collection techniques that are not harvest-based (camera samples, summer deer observations, deer seen while hunting, spotlight surveys, pellet counts, etc.). These techniques will be developed with input from surveys staff and Wildlife Management Unit personnel to ensure consistency of data across spatial areas.

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This publication is available in alternative formats. For additional information or assistance on this publication, contact: MDNR, Wildlife Division, P.O. Box 30444, Lansing, MI 48909-7944

Table 1. Timeline of activities for a mandatory Quality Deer Management process.

Action	Date	Year
Draft proposal to Wildlife	October 1, two years before	
Management Unit Supervisor	implementation	
Critique by Wildlife and Law	February 1	Year 1
Final proposal	May 15	
Notice printed in Guide	June 1	
Public meeting(s)	July through November	
Data collection pre-regulation	July through hunting seasons	
Payment for survey	Before December 1	
Mail survey	December-February	
Survey results	March 1	
Submitted to NRC for information	April	
Action by NRC	May	Year 2
Regulation printed in Guide	June 1	
QDM regulation implemented	October 1	
Evaluation year 1	July through hunting seasons	
Evaluation year 2	July through hunting seasons	Year 3
Evaluation year 3	July through hunting seasons	Year 4
Evaluation year 4	July through hunting seasons	Year 5
Evaluation year 5	July through hunting seasons	Year 6
Final evaluation of QDM area	March 1 following last hunting season	Year 7

# Appendix A. Quality Deer Management Workgroup Participants

Michigan Farm Division, represented by Mr. Scott Everett

Wildlife Unlimited of Dickinson County, represented by Dr. Art Belding

Quality Deer Management Association – Mid-Michigan Branch, represented by Mr. Ed Spinazzola

Michigan United Conservation Clubs, represented by Mr. Dennis Knapp

Michigan Bow Hunters Association, represented sequentially by Mr. David Roose and Mr. Dean Hall

Gateway Sportsman Club of Unionville, represented by Mr. Donald Carpenter

Commemorative Bucks of Michigan, represented by Mr. Terry Kemp

Michigan State University, Department of Fisheries and Wildlife, represented by Dr. R. Ben Peyton

Michigan Department of Natural Resources, Wildlife Division

Mr. Richard Shellenbarger – Gladwin Field Office

Mr. Robert Doepker – Norway Field Office

Mr. Terry Minzey – Cusino Field Office

Mr. Rodney Clute – Crane Pond Field Office

Mr. John Urbain – Lansing

Dr. William Moritz – Lansing

Michigan Department of Natural Resources, Law Enforcement Division Mr. David Purol

# Appendix B. List of conditions where Quality Deer Management may be difficult to achieve. (QDMA slide presentation by Dr. Brian Murphy, President, Quality Deer Management Association at the 21<sup>st</sup> Annual Meeting of the Southeast Deer Study Group)

Quality Deer Management is typically more difficult to achieve in areas with:

