IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

MIKE NAIG
SECRETARY OF AGRICULTURE

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Iowa Farmed White-Tailed Deer Predictive Genetics Application

The Iowa Department of Agriculture and Land Stewardship (IDALS) is utilizing USDA-APHIS chronic wasting disease (CWD) Cooperative Agreement funding to work with Iowa white-tailed deer farmers to determine Genomically Estimated Breeding Values (GEBV) which look at alleles that reduce susceptibility to CWD across the entire white-tailed deer (WTD) genome. Tissue testing will be paid for by IDALS and conducted through the North American Deer Registry (NADR). Results will be analyzed by IDALS.

Testing Eligibility

- All animals tested must be farmed white-tailed deer (*Odocoileus virginianus*). Hybrids or other farmed Cervidae species are not eligible.
- All white-tailed deer tested must be officially identified (ID) and the ID must be included on the inventory list of animals submitted to IDALS and NADR.
- Only animals included on the inventory list submitted with this application and approved by IDALS can be tested. An electronic, fillable inventory form is available at: https://iowaagriculture.gov/sites/default/files/animal-industry/pdf/2024/NADR%20and%20IDALS%20GEBV%20animal%20list%20spreadsheet.xlsx or e-mailed per request.
- Farmers must be compliant in the Iowa CWD Herd Certification program at the time of application for consideration.

Sample Collection and Submission

- CWD Susceptibility Genomic Testing is conducted through the North American Deer Registry (NADR). Sampling techniques, supplies, and shipping instructions are determined by NADR.
- Producers are responsible for obtaining supplies needed for tissue sample collection, collecting samples, and shipping samples to NADR.
- Instructions for tissue collection and necessary supplies can be found by visiting: https://www.nadeerregistry.com/samplestissue.html.
- Sample submissions to NADR MUST be accompanied by IDALS approved inventory list.

Data Utilization

GEBV testing has been developed to allow producers to increase genetic resistance to CWD through selective breeding of animals with higher genetic resistance and selective culling of animals with increased genetic susceptibility to CWD. IDALS encourages producers to develop a herd management plan that will use the GEBV's to incorporate predictive genetics as a tool in reducing the CWD susceptibility of their farmed white-tailed herd. It is suggested that animals with a GEBV above -0.056 be phased out of the herd breeding program.

Data Sharing

Producers must provide a copy of genetic test results to IDALS at cervid@iowaagriculture.gov within 14 days of receiving test results from the NADR. Failure to provide test results to IDALS may prevent participation in future funding opportunities.

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Date:_____

Name of Producer:_____

Producer Address:_____
City:_____, IA Zip code:_____
Producer Telephone Number:_____
Producer Email Address:_____
Herd Number:_____
Number of Whitetail Deer to be Tested:_____
Date:_____

Please initial next to each term to signify that you have reviewed and understood each term:

____I understand that I can only submit samples from farmed white-tailed deer for GEBV testing and that I am responsible for sample collection and submitting samples to NADR.

____I understand IDALS will only reimburse NADR for GEBV testing of approved white-tailed deer in my herd and that any other testing requested on the sample shall be at my own expense.

____I agree to maintain official ID on all tested deer when they are in my possession.

____I agree to share GEBV results for my herd with IDALS **within 14 days** of receipt of the GEBV results from NADR.

____I have included an accurate and complete electronic inventory of animals from which I intend to collect samples with this application and that I will submit the same inventory to NADR when submitting samples.

In consideration of your GEBV testing application, how do you plan to utilize this testing?

Submit application and inventory spreadsheet with animal identification to IDALS at cervid@iowaagriculture.gov.

Upon receipt, IDALS will review to ensure the application is complete, herd is compliant with Iowa's CWD HCP and that the Animal ID list reflects animals documented to be in your herd. Upon verification, you will be contacted by e-mail by our office approving you to ship samples to NADR.

Disclosure:

All of the information provided with this application is accurate to the best of my knowledge. I agree to submit all results to IDALS within 14 days of receipt of the GEBV results from NADR.

Signature_____ Date_____

For Office Use Only:

☐Approved ☐Denied Date: _____

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