

# MULE DEER WORKING GROUP DIRECTORS REPORT

July 24, 2016 (1-5pm) Cody WY  
Chair – Jim Heffelfinger, Arizona Game and Fish Department



## **Mule Deer & Movement Barriers**

- Limited print run shared at mid-winter; a few formatting issues were cleaned up and agencies ordered copies they wanted for a full printing. Posted already in the MDWG website.

## **Mule Deer Translocation and Disease Protocol**

- Written collaboratively with the Wildlife Health Committee (mostly them) and final was sent to directors 3 weeks ago. With the approval of the MDWG report I'll be asking for your approval to distribute this document. Will be posted on the MDWG website.

## **Mule Deer Status Update**

- Agreed to produce this for each summer WAFWA meeting to update directors, staff, public and media on the status of mule and black-tailed deer throughout their range. Posted on MDWG website.

## **North American Mule Deer Conservation Plan MOU**

- Signed by USFWS, BLM, and USFS but USGS and NRCS couldn't sign it because they have new language they require and are not land management agencies so it didn't apply to them as much as the land management agencies.
- The MOU is still useful with the signatures of the main land management agencies (BLM, FS, FWS) so we agreed to proceed with finalizing the MOU with those agencies.
- NRCS would like to have an MOU, but they need one more specific to private land owners.

## **Update from BYU research on mule deer translocation (Randy Larsen, BYU)**

Highlights:

- Capture related deaths were less than 5%
- Majority of mortality associated with predation (primarily during summer)
- First year translocated deer had 50% survival, Second year survival was higher and not significantly different than resident deer. (about 80-90% annual survival)
- Younger deer 3 times more likely to survive than older deer
- Body condition didn't influence the survival of translocated deer.
- Translocated deer had huge wandering movements during summer in year 1, less in year 2 and even less in year 3.
- Most deer returned to the winter range where they were released (~7 km)
- Reproduction was equal between control (resident) and translocated deer; most had fawns that appeared to have normal survival
- Next meeting we will discuss status of efforts in NM and the movement of urban deer in UT and costs associated with deer movements.
- Ear-tagged translocated deer were seen in groups with resident deer within a few weeks.

## **Overview of WY Coop research on mule deer migration (Matt Kauffman)**

### Update on Wyoming Migration Initiative

- In Wyoming mule deer are very strongly migratory statewide and are the longest migrators.
- Migration route is a habitat type, not just winter/summer range
- Stop-overs are important resource areas connected by corridors
- During migration deer spend about 95% of their time in stop-over areas
- Mule deer spend 40 to 120 days/year migrating
- Same stopover areas used year after year and most deer use the same ones within a corridor
- Overlaid all animals and they came up with population- level corridors and stop-over sites
- “Surfing the green wave” has been used to describe the slow progression of migration in spring back to core summer range. Green wave is new growth during the spring growing season.
- Researching how animals respond to development on migration in terms of behavior and survival
- 3 general effects to surface disturbance:
  - Detouring around the development
  - Speed up when they move through development
  - Stop-over use is reduced in areas of development (> 60% reduction in stop-over use in this study)
- Red Desert migration study done with Hal Sawyer
  - 150 km migration along the Wind River Range
  - Many impediments and jurisdictions involved
  - Information allowed them to work on specific impediments
- WYGFD used this information to update their policy on what a corridor was and how to integrate that information into management to protect and improve these migration routes.

This discussion of what WY was able to do with this information, generated a discussion about how to transfer this information to other states who are already asking for this. We would like to facilitate a technology transfer to those states who are interested by organizing a series of workshops put on by Matt Kauffman to showcase the process WY used to identify corridors.

### **Rangewide Survival Analysis (Paul Lukacs, University of Montana)**

- This analysis will pool telemetry data already housed in agencies files and allow for a larger rangewide analysis to evaluate survival relationships with environmental conditions, allow managers to extrapolate survival rates to other areas lacking those data, and provide information to be used to improve population models.
- Southern Rockies LCC agreed to fund \$110,000 of the estimated \$145,000 needed to complete this project. This will allow us to get started on the analysis and find the remaining funding.

### **Reseeding Guidance Document Update**

Ashley Green (UT) has the lead on this project to produce a guidance document for practitioners about reseeding in a way that benefits mule deer. This will apply to

rehabilitation projects as well as habitat improvements. We have seen slow progress on this because of some other priorities but, Ashley Green has made this a top priority and is able to focus his efforts on this. He will have a draft completed by next February's meeting.

### **Mule Deer Fact Sheet**

- *Fire and Nutrition* Fact Sheets are final and the final drafts were sent to directors 3 weeks ago and I'll be asking for approval to publish as part of this MDWG report.
- Two first drafts provided at this meeting simply as an FYI (*Habitat Type Conversion and Public Process*). These are currently being reviewed by the MDWG.
- Others in progress:
  - *Economic Contributions*
  - *Pinyon-Juniper Thinning*
  - *WT x MD Ecological Interactions*
  - *WT x Mule deer Hybridizations*
  - *Antler Development*

### **New Mule Deer Book**

The classic mule deer book edited by O. C. Wallmo is now 35 years old and there is a great need for a new source on mule deer information. The MDWG and its collaborators are in the perfect position to make this happen. The MDWG agreed to have Jim Heffelfinger work with Paul Krausman to use his expertise in running book projects through the publication process with the MDWG organizing what the chapter topics will be and who will be asked to write them. The MDWG will finalize the outline they started last meeting and work with Paul to submit a book proposal to Johns Hopkins University Press.

### **BLM Webinar for Mule Deer**

MDWG is working with BLM and Mule deer Foundation to produce a 1-hour webinar on the importance of mule deer, what issues they are challenged with, what tools/products are available to resource managers, and how to work with other agencies and NGOs to make good things happen on the ground for mule deer. We will be developing an outline with plans to host the webinar in January 2017 and then post the recorded version on the BLM website to be viewed by anyone. This is an opportunity for best available science to be distributed to BLM managers and field offices.

### **CWD Management at the Population Level**

There is a newly established CWD committee in Wyoming to look at how to manage the spread of CWD. Should the MDWG collaborate with the Wildlife Health Committee to look at what states and provinces have done to try to manage the spread of CWD? It would be good to summarize what agencies have done from attempts to eradicate deer in areas to a hands-off approach. What were the effects of these management actions/inactions on CWD prevalence rates? This might help agencies when considering what to do in their case. This should include eastern whitetails and elk.

This might be revisited at the 2017 Deer and Elk workshop in Sun Valley, ID. It will be on the agenda of the National Deer Alliance "Deer Summit" in June 2017 in Fort Worth Texas.

**With the approval of this report, I am asking you to approve the publication of the Fire and Nutrition Fact Sheets and the Deer Translocation and Disease Protocol.**