



Meeting Our Commitments

Funding Important Research

Ultra, Shell and QEP Energy have voluntarily supported research of pronghorn antelope, mule deer and sage grouse to study habitat and behaviors. Our contributions toward wildlife and vegetation studies to date are more than \$4.9 million. This commitment includes:

Mule Deer Study – Phase II Completed in 2008

- A decline in mule deer population usage for the first four years is attributable to multiple elements, including natural gas activity. Areas outside of the PAPA saw similar declines due to harsh winters early in the study, but recovered quicker.
- The last three years have shown increasing winter use of the PAPA by mule deer (nearly 30%) and results show positive trends in the mule deer avoidance distances which coincide with use of mitigation tools such as the LGS and directional drilling.

Pronghorn Study – Continuing Through 2010

- Most pronghorn appear to be unaffected by gas drilling in the study areas.
- Preliminary data indicates that pronghorn from gas fields compared positively to pronghorn in the control group and in the entire herd unit area including measures such as survival rates and stress levels.



Sage Grouse Study – 2009 Was the Fourth Year of a Five-Year Study Commitment

- Results suggest sage grouse are avoiding and spending less time in habitats near natural gas development associated with relatively high levels of activity.
- However, sage grouse are not avoiding areas near well pads with LGS, suggesting piping liquids off-site prior to collection may reduce impact.

Vegetation Study – Will Conclude in Early 2010

- Taking inventory of the vegetation types and habitats present in the PAPA.
- Ultra, Shell and QEP Energy will apply findings to habitat management and reclamation-restoration efforts.

For more information about wildlife studies, please visit: http://www.blm.gov/wy/st/en/field_offices/Pinedale/anticline.html.