

| MONDAY, 1 FEBRUARY 2016 | |
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| | <i>Arrivals</i> |
| 12:00 | Registration Open |
| <i>Senate</i> 13:20 - 15:20 | Workshop: Remote Spatial Data Collection (Organizers: David Brandt & Bart Ballard) |
| 13:20 | Introduction to the Workshop |
| 13:30 | GPS PTTs on Mallards (Elisabeth Webb, USGS Missouri Cooperative Fish and Wildlife Research Unit) |
| 13:55 | GPS PTTs on Lesser Snow Geese (Ray Alisauskas, Environment Canada, Prairie and Northern Wildlife Research Center) |
| 14:20 | GPS PTTs (Keith LeSage, Dave Evans, GeoTrak Inc.) |
| 14:45 | ICARUS INITIATIVE, A New Experimental Global Small-animal Observation System (Martin Wikelski, via Skype) |
| 15:15 | <i>Coffee break</i> |
| <i>Senate</i> 15:30 - 17:30 | Workshop: Remote Spatial Data Collection (Organizers: David Brandt & Bart Ballard) |
| 15:30 | GSM CTTs on Mallard and Gadwall (Michael Casazza, USGS, Dixon Field Station) |
| 15:55 | GSM CTTs (Andrew McGann, Product Specialist, Cellular Tracking Technologies) |
| 16:20 | VHF/UHF Linked GPS Dataloggers on White-fronted Geese (Brandt Meixell, USGS, Alaska Science Center) |
| 16:45 | Geo-locators on Ducks (Chris Nicolai, US Fish and Wildlife Service) |
| 17:10 | Discussion |
| 17:30 - 19:00 | <i>Break before Welcome Reception</i> |
| 19:00 - 20:00 | WELCOME RECEPTION – <i>Capital Ballroom</i> |

Workshop: Monday, 1 February 2016, 13:20

Remote spatial data collection for waterfowl: industry innovations, applications, and potential issues

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Recent advances in technology allow researchers to apply monitoring devices that remotely collect highly accurate positional data to a variety of waterfowl species. As with any new technology, unforeseen issues arise, possibly more so when applied to free ranging, migratory species that encounter varied climates and environments. Free exchange of ideas is often limited to dialogue between individual scientists and the company providing equipment, and typically pertains to specific research or monitoring projects. This symposium provides an excellent opportunity to expand these conversations to include a diverse group of North American waterfowl experts and vendors of multiple technologies in the same room at the same time.

This workshop will involve participation from researchers who have recently employed these new technologies in waterfowl-related research. Their presentations will focus on information pertaining to the performance of these devices on their subject species, with particular attention given to known issues that have presented themselves through their study. The workshop will also involve developers of these technologies presenting information to the scientific community about the capabilities and limitations of their technology, known issues from a development and manufacturing standpoint, and what possibly lies ahead for the future that might be of interest for research and monitoring. A question and answer session will follow each presentation.

Science:

VHF/UHF Dataloggers on White-fronted Geese (Brandt Meixell*, U.S. Geological Survey, Alaska Science Center)

GPS PTTs on Lesser Snow Geese (Ray Alisaukas*, Environment Canada, Prairie and Northern Wildlife Research Centre)

GSM CTTs on Mallard and Gadwall (Michael Casazza*, U.S. Geological Survey, Dixon Field Station)

GPS PTTs on Mallards (Lisa Webb*, U.S. Geological Survey, Missouri Cooperative Fish & Wildlife Research Unit)

Geo-locators on Ducks (Chris Nicolai*, U.S. Fish and Wildlife Service)

Industry:

GSM CTTs (Cellular Tracking Technologies)

GPS PTTs (GeoTrak Inc.)

Non Argos-based Satellite Tracking System (ICARUS Initiative)