Portland State University
Environmental Sciences and Resources
CENTER FOR LAKES AND RESERVOIRS
Trevor Sheffels, Graduate Student

NUTRIA MANAGEMENT IN THE PACIFIC NORTHWEST

WORKSHOP SUMMARY

Purpose

The workshop was designed to address the following primary objectives:

1. Provide information about the historical and current status of nutria (*Myocastor coypus*) on the national and regional scale; outline current and future nutria impacts.
2. Facilitate communication and cooperation regarding nutria research on both the regional and national scale.
3. Discuss regional nutria management strategies and coordination with a national nutria management plan.

General

The workshop was organized primarily by Trevor Sheffels, Robyn Draheim, and Mark Sytsma from Portland State University (PSU), Paul Heimowitz from the United States Fish and Wildlife Service (USFWS), and Jacoby Carter from the United States Geological Survey (USGS). PSU, USFWS, and USGS were also the major funding partners, but additional funding was provided by the Environmental Protection Agency, Washington Department of Fish and Wildlife, Clean Water Services, and Vancouver Water Resources Education Center.

Registration for the workshop was open to all interested parties. However, specific local, regional, and national groups and individuals were targeted for participation. Announcements were circulated throughout the Pacific Northwest to cities, universities, watershed councils, wildlife refuges, tribal organizations, surface water agencies, soil and water conservation districts, parks and recreation districts, diking districts, water control districts, state and federal environmental agencies, and various public and private companies. Complete lists of all participating agencies and organizations for both sessions can be found in *Appendix I.*

The workshop took place on April 24-25, 2007, in Vancouver, WA. The April 24th session was held in the community room at the Vancouver Water Resources Education Center and the April 25th session was held in the USGS Cascades Volcano Observatory conference room. Both sessions were scheduled as all-day meetings with coffee and lunches provided for both sessions. The first session was attended by 90 individuals, while the second session was restricted to 20 individuals for logistical reasons.

Session #1 – April 24, 2007 – Vancouver Water Resources Education Center

Upon arrival, all participants were issued a registration packet with a complete agenda (*Appendix II*) and various nutria informational materials. Attendees were encouraged to participate in the ten minute Q & A session following each presentation and visit the area where presentation posters were located.

The session began with a welcome and introduction from Mark Sytsma, PSU Center for Lakes and Reservoirs Director, who served as the moderator for the session. Representatives from the USFWS, Oregon Department of Fish and Wildlife (ODFW), and Washington Department of Fish and Wildlife (WDFW) stressed the significance of regional nutria research and management for their respective agencies. Dan Diggs, USFWS Pacific Region Assistant Regional Director of Fisheries, addressed the development of a national Aquatic Nuisance Species Task Force (ANSTF) nutria management plan and the importance of Pacific Northwest participation in developing this plan. Jim Gores, ODFW Invasive Species and Wildlife Integrity Coordinator, discussed the ODFW perspective on current challenges and future issues connected with nutria in the state of Oregon. Pamala Meacham, WDFW Assistant Aquatic Nuisance Species Coordinator, discussed the current expansion of nutria populations in Washington State and the importance of regional cooperation.

The second segment of the session focused on current nutria research and management activities being conducted on the national scale by the USGS, United States Department of Agriculture (USDA), and Louisiana Department of Wildlife and Fisheries (LDWF). Jacoby Carter, USGS Invasive Species Program Nutria Research Coordinator, reviewed the history of nutria introduction and invasion, current research questions and efforts, and the different strategies implemented by nutria control programs. Stephen Kendrot, Supervisory Wildlife Biologist for the Maryland branch of the USDA-Animal and Plant Health Inspection Service-Wildlife Services, discussed the harmful impacts of nutria and Maryland's successful efforts to mitigate these impacts. He also discussed his role as the head of the national ANSTF nutria working group being developed to create a national nutria management plan. Gary Witmer, Research Wildlife Biologist for the USDA National Wildlife Research Center, discussed advantages and disadvantages of available nutria eradication and management methods, current nutria control research, and future research needs. Edmond Mouton, LDWF Biologist Program Manager, summarized the history and development of the Coastwide Nutria Control Program and the effectiveness of the program in preserving coastal marshes in the state of Louisiana.

The third segment of the session focused on nutria management and research efforts at the regional and local level. Mike Davison, WDFW District Wildlife Biologist, summarized the Skagit County, Washington, nutria rapid response plan from a historical, current, and future perspective. Brian Vaughn, Clean Water Services Water Resources Project Coordinator, discussed nutria impacts on water quality and habitat restoration efforts in Washington County, Oregon, and his organization's nutria management and monitoring efforts. As part of the presentation, Debbie Frankel, graduate student at Portland State University-Environmental Sciences and Resources Department, summarized her research regarding nutria impacts on local water quality. Justin Stevenson, Wildlife Disease Biologist for the Oregon/Washington/Alaska branch of the USDA-Animal and Plant Health Inspection Service-Wildlife Services, discussed the possibility of diseases being transmitted from nutria to humans as a result of nutria populations in the Pacific Northwest living in close proximity to humans. Stevenson also summarized a future USDA-Wildlife Services study of the prevalence of Johne's disease in nutria in Tillamook County, Oregon.

Finally, the day concluded with a panel discussing nutria impacts on restoration efforts and communities in the Pacific Northwest. The panelists were Bruce Barbarasch-Tualatin Hills Parks and Recreation District, Matt Cleland-USDA/APHIS/Wildlife Services/Washington, Lauri Mullen-City of Eugene Public Works Parks and Open Space Division, and Tim Esary-City of Vancouver Greenways. All of the panelists summarized their respective nutria issues, which included the destruction of habitat restoration projects, the cost of nutria management efforts, nutria populations expanding into highly urban areas, and people regularly feeding nutria. The panelists then fielded a variety of questions from the audience and discussion continued in an interactive manner. Finally, the floor was opened to anyone who had any closing comments or thoughts. Before the session was adjourned, participants were encouraged to utilize the information provided in their registration packets and expand communication efforts regarding regional nutria issues.

Registration packet informational materials and session presentations are available online at:

http://www.clr.pdx.edu/projects/ans/nutriaworkshop.php

Session #2 – April 25, 2007 – USGS Cascades Volcano Observatory

The purpose of the second session was to create an additional opportunity for communication and coordination between agencies and organizations committed to developing nutria research and management strategies for the Pacific Northwest. The meeting was restricted to twenty interested individuals who are in positions to implement nutria research and management strategies at the regional level. The session was co-mediated by Paul Heimowitz, USFWS Pacific Region Aquatic Nuisance Species Coordinator, and Mark Sytsma. The entire session was structured as an open forum meant for all members to actively participate in the discussions.

Stephen Kendrot started the session by speaking about the process used to develop the Chesapeake Bay nutria management plan and potential lessons to be learned from that process. The rest of the day was spent discussing nutria research and management priorities for the Pacific Northwest and how these priorities could be integrated in the national ANSTF nutria management plan. At the end of the session a list of action items and lead agencies was developed (*Appendix III*).

For questions or requests for more information, please contact:

Trevor Sheffels
Graduate Student
Portland State University
Environmental Sciences and Resources
Center for Lakes and Reservoirs
PO Box 751 – ESR
Portland, OR 97207-0751

Phone: (503) 725-9076
Fax: (503) 725-3834
Email: sheffels@pdx.edu

APPENDIX I

The following agencies and organizations were represented at the first session on April 24th:

Portland State University	Louisiana Dept. of Wildlife and Fisheries
Center for Lakes and Reservoirs	Metro Regional Parks and Greenspaces
Environmental Sciences and Resources Dept.	Clean Water Services
Oregon State University	Yakama Nation Wildlife Resource Mgmt.
Department of Fisheries and Wildlife	SOLV
Department of Crop and Soil Science	Marion Soil and Water Conservation District
Sea Grant	Polk Soil and Water Conservation District
United States Fish and Wildlife Service	West Multnomah Soil and Water Conser. Dist.
Pacific Region	Tualatin Soil and Water Conservation District
Tualatin River National Wildlife Refuge	Tualatin Hills Parks and Recreation District
Ridgefield National Wildlife Refuge	Willamalane Parks and Recreation District
United States Geological Survey	Ash Creek Water Control District
United States Department of Agriculture	Wahkiakum Diking District
Animal Plant Health and Inspection Services	Multnomah County Vector Control
Wildlife Services	Alsea Watershed Council
National Wildlife Research Center	North Coast Watershed Association
Oregon	Puget Sound Action Team
Washington	City of Eugene Public Works
Maryland	City of Albany Public Works
Washington County	City of Sherwood Public Works
Clackamas County	City of North Plains Public Works
National Resources Conservation Service	City of Forest Grove Public Works
Forest Service	City of Beaverton Public Works
Environmental Protection Agency	City of Portland Bureau of Environmental Ser.
United States Army Corps of Engineers	City of Gresham Dept. of Environmental Ser.
Oregon Department of Fish and Wildlife	City of Vancouver Greenways
Invasive Species and Wildlife Integrity	Tualatin Hills Nature Park
Sauvie Island Wildlife Area	Jackson Bottoms Wetland Preserve
Washington Department of Fish and Wildlife	Greenwood Resources
Aquatic Nuisance Species	Intel Corporation
Region 6	Oregon Garden
La Conner District Office	Riverside Golf and Country Club
Cowlitz Wildlife Area	Genesis Laboratories
Washington Department of Ecology	Korean Broadcasting System
Washington Department of Natural Resources	Clatskanie Beaver Drainage Improvement Co.

The following agencies and organizations were represented at the second session on April 25th:

Portland State University	USDA/APHIS/Wildlife Services
US Fish & Wildlife Service	National Wildlife Research Center
United States Geological Survey	Oregon
OR Dept. of Fish & Wildlife	Washington
WA Dept. of Fish & Wildlife	Maryland
Tualatin Hills Parks & Rec. Dist.	City of Gresham Dept. of Env. Ser.
Clean Water Services	Genesis Laboratories

APPENDIX II

Session #1 Agenda

TIME	SUBJECT	SPEAKER
8:30 am	Welcome and Introduction	Mark Sytsma, PSU
8:35 am	The Federal Aquatic Nuisance Species Task Force: Addressing Nutria as a National Concern	Dan Diggs, USFWS
8:45 am	ODFW's Perspective on Invasive Species	Jim Gores, ODFW
8:55 am	A Worldwide Review of Nutria Introductions, Research and Management: A USGS Perspective	Jacoby Carter, USGS
9:35 am	Nutria Control and Eradication Efforts in the US: Implications for a Nationwide Management Strategy	Stephen Kendrot, USDA
10:15 am	Break	
10:30 am	Nutria Control Methods and Some Current Research	Gary Witmer, USDA
11:10 am	Louisiana Coastwide Nutria Control Program: Years 1-5	Edmond Mouton, LDWF
11:50 pm	Lunch	
12:50 pm	Nutria - The Search For Weapons Of Marsh Destruction in Skagit County	Mike Davison, WDFW
1:30 pm	Clean Water Services Nutria Monitoring and Control Program	Brian Vaughn, CWS Debbie Frankel, PSU
2:10 pm	Nutria: What We Don't Know May Surprise You	Justin Stevenson, USDA
2:50 pm	Break	
3:05 pm	Panel discussing nutria impacts on restoration efforts and communities in the PNW **(*audience participation is encouraged)*** Panelists: Bruce Barbarasch, Tualatin Hills Parks and Recreation District Matt Cleland, USDA/APHIS/Wildlife Services/Washington Lauri Mullen, City of Eugene Public Works Parks and Open Space Division Tim Esary, City of Vancouver Greenways	
4:05 pm	Closing comments	Mark Sytsma, PSU
4:15 pm	Adjourn	

All 40 minute presentations include 10 minute question and answer session following talk.

APPENDIX III

Session #2 Action Items

- RESEARCH
  - Behavior
    - Feeding preferences
    - Communication
    - Relationship between burrowing and slope
      - Interaction with substrate
    - Mechanism of competition with other wetland mammals (ex. muskrat)
  - Movement/dispersal
    - Home range dynamics in linear systems
    - Urban vs. non-urban
      - Human effects on connectivity
    - Importance of climate on distribution
      - Winter temperatures
      - Northern/southern limits of distribution
  - Habitat preference
    - Importance of hydrologic regime
    - Reed canary grass facilitation
    - Refugia
    - Minimal requirements
  - Demography
    - Minimum sustainable population
      - Habitat specific
    - Modeling distribution and populations
  - Impacts
    - Burrowing
      - Water quality/sediment loading
      - Structural integrity
        - Dikes/roads/stream banks/agricultural fields
    - Salmon and waterfowl habitat
    - Riparian and wetland vegetation
    - Impacts relative to other species (ex. muskrat)
  - Trapping Improvements
    - Multiple capture traps
    - Lures and toxicants
    - Detection of small populations

- MANAGEMENT
  - Best management plans
    - Rapid response plans
    - Prevention
      - Anti-nutria design of water structures
      - Enforce regulations on relocating animals
  - Stakeholders/partners
    - Communication/coordination/leadership
    - Funding sources

- Scale of plan
  - Regional (OR/WA/CA/ID)
  - State plans
  - Watershed plans
  - Local governments
    - Special districts
- Legislature/regulatory issues
  - Live trapping and relocation
  - Synch OR and WA laws
- Relationship between nutria population density and human acceptance/support

- AGENCY/ORGANIZATION COMMITMENTS
  - 2007
    - Local
      - Gresham
        - Signage to prevent people from feeding nutria
        - Trapping program
      - Eugene
        - Trapping program
      - Albany
        - Trapping program
      - Clean Water Services
        - Trapping program
        - Signage to prevent people from feeding nutria?
      - Alsea (Joe Roehleder)
        - Explore relationship between nutria and salmon habitat
    - USDA/APHIS/Wildlife Services
      - Disease study in Tillamook County
      - Disease testing of aggressive nutria (w/ CWS)
      - Monitoring Vancouver for tularemia in nutria
      - Trap testing
      - Lure/attractant development
      - Best management practices
      - Skagit County monitoring (w/ WDFW)
        - Continue through 2010
    - Portland State University
      - Summary of nutria workshop
      - PNW distribution map
      - Impact on riparian restoration plantings (w/ CWS)
      - Debbie Frankel thesis on nutria and water quality (w/ CWS)
    - USFWS
      - Proposal for funding from ODFW (w/ USGS)
      - Explore coordination with CA and ID
  - 2008
    - USGS

Long-term nutria response program