Oregon Wildlife Movement Strategy

Pacific Northwest Wildlife Connections
October 20, 2008 – Oregon Zoo
Why State Strategies (Action Plans)?

• An unprecedented national effort

• “Keep the common species common”

• Make the best use of limited conservation dollars
Oregon Conservation Strategy
Six Key Conservation Issues

- Land use changes
- Invasive species
- Changes in fire, flood regimes
- Water quality and quantity
- Institutional barriers to voluntary conservation
- *Barriers to fish and wildlife movement*
Oregon Wildlife Movement Strategy

- Provide a framework for cooperation
- Promote wildlife movement and habitat permeability
- Reduce the social, economic, and environmental impacts of transportation and wildlife conflicts
Oregon Wildlife Movement Strategy

Steps to Address Wildlife Movement and Road Crossings in Oregon

Tier 1: Basic Information
- Roadkill Data
- Priority Wildlife Movement Areas
- Wildlife Collision Hot Spots

Tier 2: Defining Solutions
- Integration of Hot Spots
- Wildlife Crossing Scoping
- Implementation Plan

Tier 3: Implementing Solutions
- Design Guidance
- Monitoring and Maintenance

Yellow = ODOT; Red = ODFW; Orange = Multi Cooperation (ODFW, ODOT, USFWS, USFS, State Parks, BLM, Local Governments)
“Best place to provide for animal movement needs, with an emphasis on areas that cross roads”

**ODFW convened four workshops in 2007**
- Review session at The Wildlife Society
- Bend, Roseburg, La Grande & Alsea
ODFW linkage workshops

- Breakout sessions worked with existing maps and with GIS

- Product: Identified linkage areas that cross transportation corridors throughout the state
Integrate and set priorities

- Workshop-ranked:
  - High value for focal species
  - High Threat value
- Land Ownership
- In a Conservation Opportunity Area
- In an ODOT Roadkill hotspot
Result: linkages dataset with current priorities for Oregon
THE ONLY WAY WE'RE GONNA MATE IS IF YOU LEARN HOW TO DRIVE
Roads impact wildlife in several ways:

- Habitat loss
- Direct mortality
- Indirect impacts

Diagram modified, with permission from Jaeger et al., *Ecological Modelling* 185 (2005) 329–348
Wildlife Collision Hot Spots

- ODOT data analysis

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Oregon's Animal-Vehicle Collisions

CRASH RECORDS:
- Avg. 400 wildlife collisions/yr, 14 yrs
- About 5,500 records statewide
- Less than 3% of all crash reports in Oregon

DISPATCH CARCASS REPORTS:
- Avg. 2,600 wildlife collisions/yr, 12 yrs
- About 32,000 records statewide
- 6 times more data in similar period
ODOT Wildlife Collision Hot Spot Analysis

- Existing carcass pick-up records
- Statewide, analytical approach
- Mapped high frequency wildlife-vehicle collision zones

Density:
- low
- medium
- high
Carcass Records

- Wildlife Incident Reports, call = RDKILL
- Animal Type, Deer & Elk
- 12 years of data (1995-2006)
- Location, +/- 0.5 mile
- Link Location to GIS Coordinates

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Wildlife Collision Hot Spots Results *

* exaggerated for visual aid
Discussion

• This study did not address why hotspots are found in these areas.
  – Condition assessment necessary to make sound management decisions

• Potential uses of this data:
  – Planning & Project Scoping (one of many types of data)
    • Typically, precursor to more focused studies
    • Condition assessment, road kill surveys, tracking, wildlife cameras, etc.
  – Passage Improvements (project-specific; up to Regions)
Crossing Improvements

- Wildlife passage typically not regulated
- Competitive funding for improvements:
  - FHWA Enhancement program (Category 11)
  - Oregon Transportation Plan (Goal 4.1.1)
  - Safety Funding: SAFETEA-LU Section 148
  - No other specific program, but supported by FHWA
- Must take into account long-term maintenance, monitoring
- Partnerships very important
Next Steps

- Tier 1 – Complete Prioritization
- Tier 2 – Planning Workshop & Scoping Guide
- Tier 3 – Design Workshop & Manual
For More Information

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