FROM PUBLIC PLANNING TO ACTION

- What does the public want?
- What is the status of moose (#, trend, health)?
- What do we need to know about moose?
- How do we collect that information?
- How do we apply this to manage moose for the public?
GOALS: MOOSE

RECREATION
COMPROMISE
ROAD SAFETY

GOALS:

- MAXIMIZE HUNTING
- MAXIMIZE HUNTING + VIEWING...MAINTAIN BULLS
- BALANCE MOOSE/VEHICLE...+ MAX HUNT + VIEW + BULLS
- BALANCE MOOSE VS. VEHICLE ...W/HUNTING
- REDUCE MOOSE VS. VEHICLE
OBJECTIVES: MOOSE

**OBJECTIVES:**

**RECREATION: (NW)**
By 2010, Moose at 55-65% Carrying Capacity, maintain 17% Bulls

**COMPROMISE: (E, Central)**
By 2005, Reduce pop’n (2000) by 1/3rd, maintain 17% Bulls

**ROAD SAFETY: (South)**
By 2005, Reduce pop’n (2000) by 1/3rd
Reduce pop’n to extent necessary to minimize danger to motorists
TRANSLATE PUBLIC WANTS MANAGEMENT

- X number of moose in each area
- Certain level of mature bulls

TO UNDERSTAND THIS...
COLLECT INFORMATION/FIGURE OUT

• How many moose?

• Number of Bulls, cows, and calves?

• How many are produced each year (productivity)?

• How many we lose each year (Survival/mortality)?
4 KEY MANAGEMENT ELEMENTS

DENSITY
COMPOSITION
PRODUCTIVITY
SURVIVAL
AERIAL SURVEYS: Abundance/Density
POPULATION STRUCTURE (B:C:c)
MOOSE PRODUCTIVITY
MOOSE SURVIVAL: RATE AND CAUSE OF MORTALITY
Project goals and objectives:

• Determine annual rates of adult cow and calf survival

• Determine age specific cause of mortality

• Establish “normal” values for moose health

• Assess winter tick impacts
MOOSE SURVIVAL

• 3 Study areas in collaboration with New Hampshire:
  – Coos County, NH
  – Western Mountains/Moosehead Region (WMD 8; lat. 45.62)
  – Fish River Drainage (WMD 2; lat. 46.97)
    • 1° = ~68 miles

• Conduct “Walk-ins” on Cow-calves to determine survival (UNH)
GPS COLLARS

• Email mortality detections
  – Recover moose 24–36 hrs for necropsy

• Assess movement and habitat use

• Track adult cows, clustering for calving
AERIAL CAPTURE

For each study area:
• 35 Adults (yearling and older)
• 35 calves
• Currently 147 moose

Collect:
• Weigh calves
• Blood
• Fecals
• Winter tick count
• Hair
• Photo
• Collar
NECROPSY PROTOCOL

- Recover and assess environment
- Assess external injuries
- Weigh calves
- Winter tick count
- Blood collection
- Tissue/organ sampling
- Remove to lab: head/heart/lungs abnormalities
MOOSE MANAGEMENT SYSTEM

- PUBLIC GOALS AND OBJECTIVES
  - COLLECT DATA
  - ANALYZE
  - ANNUAL HARVEST --- PERMIT ALLOCATIONS
  - PUBLIC INPUT
  - REPEAT
QUESTIONS