BEHAVIOR BASICS

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What is behavior?

"STATES"

- Feelings
- Activities
- A way to get things
- Emotions
- Wants, Desires
- Postures
- Chain of actions

"EVENTS"

- Actions
- Stimulus/response
- Instinctive reflexes
- A movement
- A sound
- Gesture
- Expression

OBJECTIVES

- Discovering questions
- What to record
- How to observe



Basic Questions

- ■What?
- ■Why?
- ■Who?
- ☐How?
- ■When?
- ■Where?

How to find answers?

Decide what to record

- Activity States
- Action Events

Decide how to observe

- Ad libitum (freestyle)
- Focal individual
- Group scan

WHAT TO RECORD?



Activity States

- Feeding
- Resting
- **Locomotion**
- Vigilance
- Social
- Grooming
- Agonistic (fight/flight)
- Exploration

Action Events

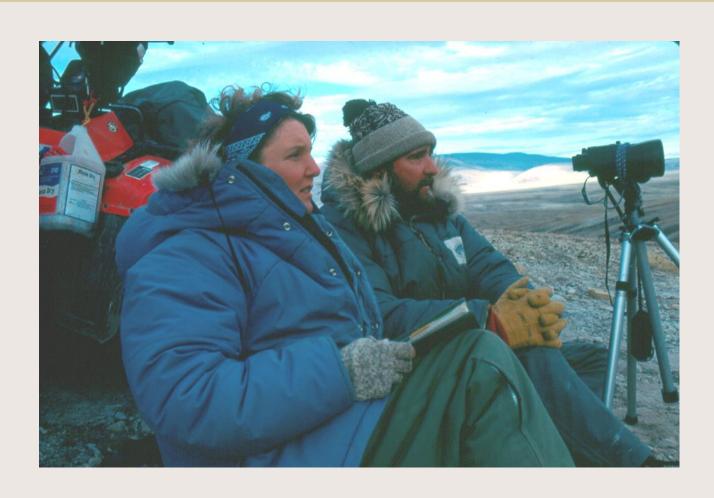
- > Step
- > Chew
- > Ear flick
- > Lie down
- ➤ Stand up
- > Raise head
- Lower head

Measurements

- > Activity States
 - Duration: number of seconds (or min.)
 - %: time feeding/ total observation time

- Action Events
 - Count: frequency of events
 - Rate: # of steps/ observation time

HOW TO OBSERVE?



Group Scan

Activity State Species	FEEDING	NOT FEEDING
ELK	////	//// //
BISON	///// /	///// ////

Focal Individual

Sample #	Activity State	Action Event
	Duration of feeding	Count the steps (left rear foot)
Sample 1	3 secs.	8 steps
Sample 2	5 secs.	15 steps

Ad Libitum (freestyle)

Time	Description of behavior
00:01	5 elk bunched together, 2 wolves running around them
00:05	Wolves wander off, elk stay bunched, calf in center
01:15	Wolves stay away, appear uninterested in elk, sniff, wander
08:25	Wolf goes into forest; direct trot

SUMMARY

- Discover questions
 - ✓ Ad libitum observations (e.g. wolves & elk)
- What to record
 - Activity states- duration (seconds)
 - ✓ Action events- counts (# of steps)
- How to observe
 - ✓ Focal Individual (e.g. single elk)
 - ✓ Group Scan (e.g. elk and bison)

SOURCES

- www.tamu.edu/ethology
 - Courses=>WFSC 422- asking questions
 - Courses=> WFSC 620- lab exercises
 - Courses=> WFSC 622=>apply
 - WWW links=>Fun Stuff
 - ABS/SCB=> educational materials
- Martin & Bateson (1993) Measuring behaviour. Cambridge Univ. Press