

# THE POST-DENNING ACTIVITIES OF THE AMERICAN BLACK BEAR (*URSUS AMERICANUS*) IN UTAH

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# Outline of our Study

- Purpose of our research
  - Identify den departure dates for maternal groups
  - Describe the post-denning behaviors at dens
  - Document sensitivity to disturbance at dens



# Methods

- Bear capture and tagging: UDWR
- Den Relocation
- Camera Placement



# Results

- 2011 ( $n = 18$ )
  - Book Cliffs: 4
  - Central Region: 4
  - Southeast Region: 7
  - Northeast Region: 3
- 2012 ( $n = 26$ )
  - Book Cliffs: 5
  - Central Region: 4
  - Southeast Region: 13
  - Northeast Region: 4

# Results

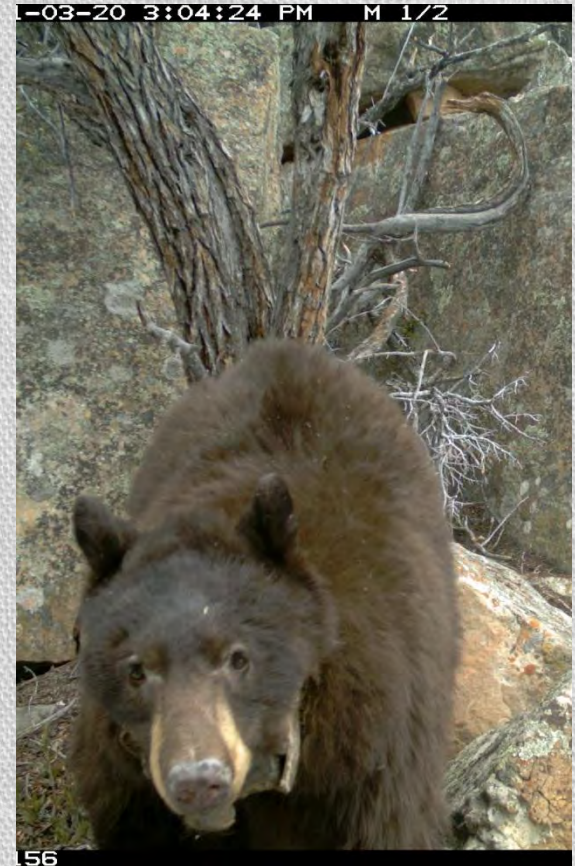
- Behavior Analysis (2011)
  - Work in progress
  - Coding behavior of bears while out of den
    - Examples



# Emergence Times

( $n = 15$ )

- Mean emergence date for all bears ( $n = 15$ )
  - 3/20/2011
- Mean emergence date for:
  - Females with cubs ( $n = 11$ ): 3/20/2011
  - Females with yearlings ( $n = 2$ ): 3/15/2011
  - Lone females ( $n = 2$ ): 3/26/2011



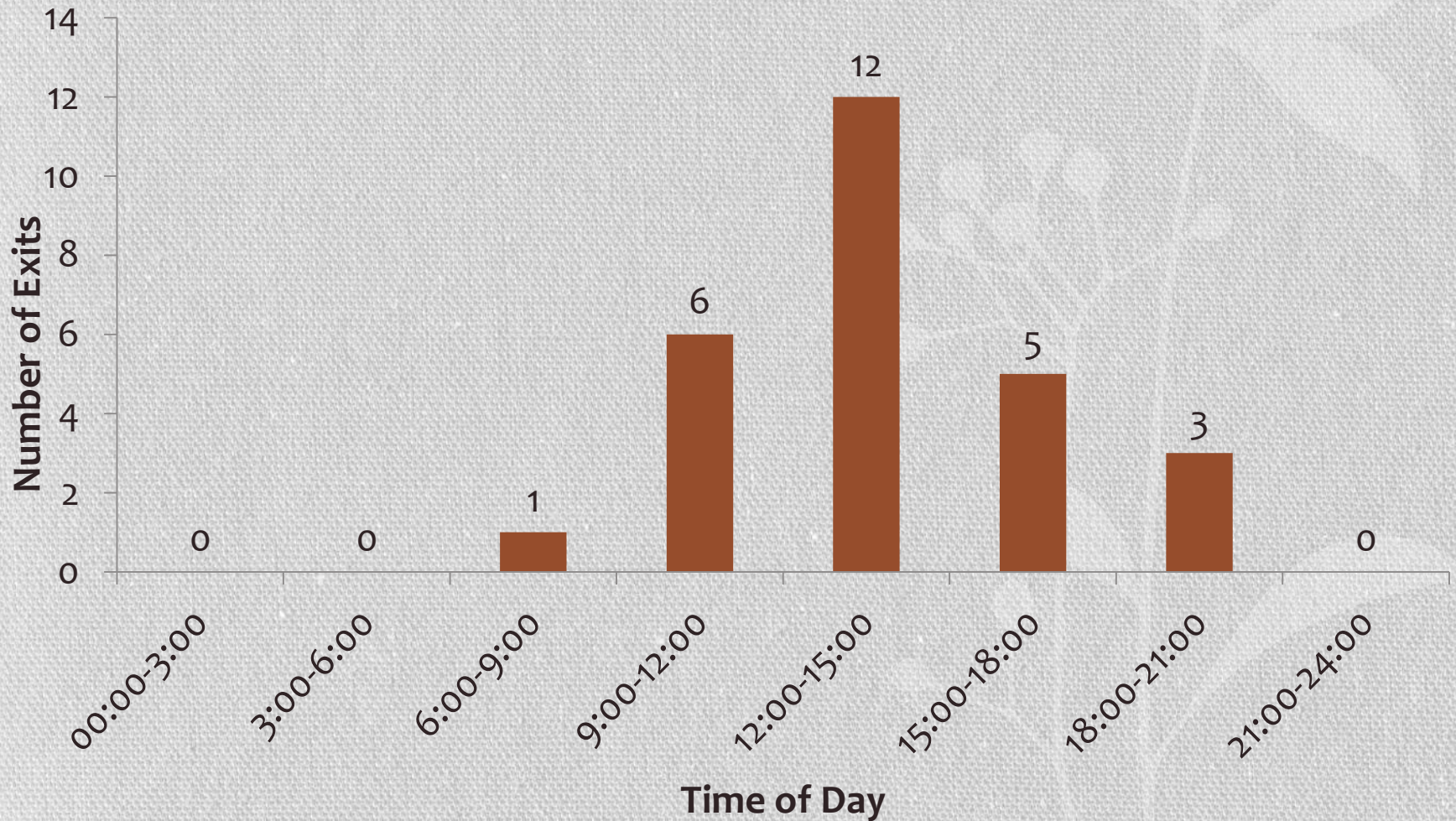
# Departure Times

( $n = 10$ )

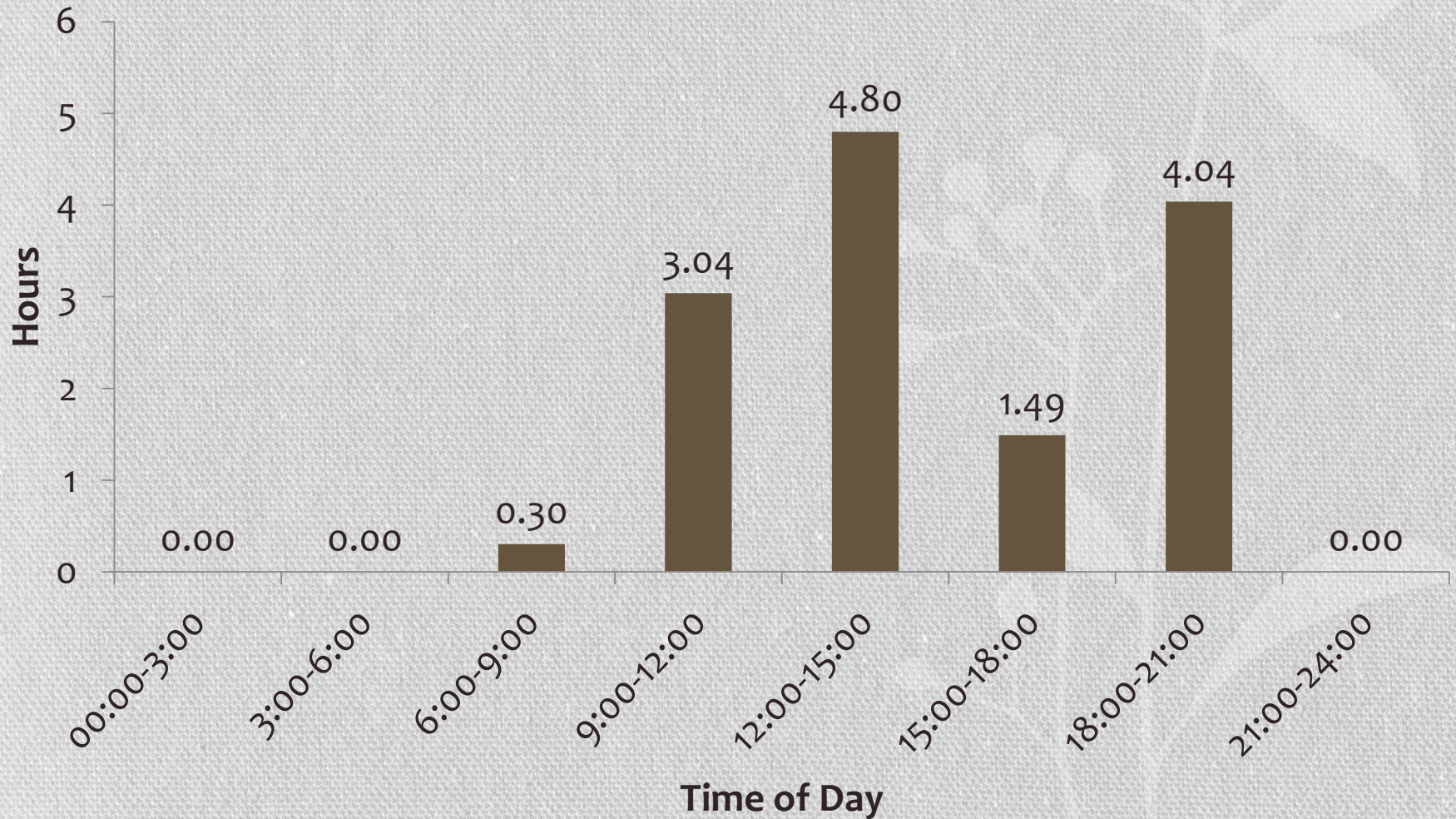
- Mean departure date for all bears ( $n = 10$ )
  - 4/4/2011
- Mean departure date for:
  - Females with cubs ( $n = 6$ ): 4/13/2011
  - Females with yearlings ( $n = 2$ ): 3/16/2011
  - Lone females ( $n = 2$ ): 3/27/2011

# Exit Frequency by Time of Day

( $n = 1$ )

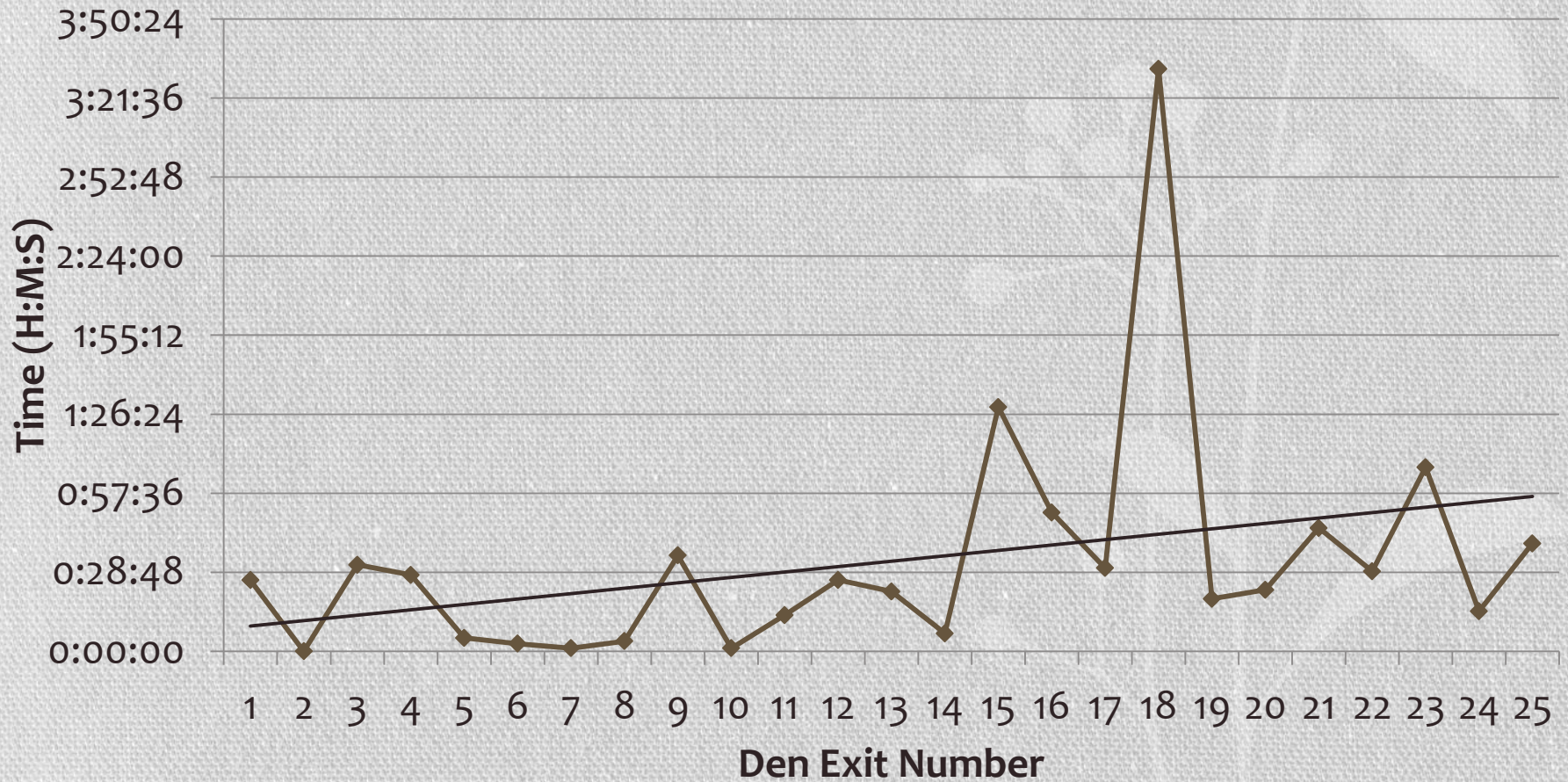


# Total Amount of Time Spent Out by Time of Day ( $n = 1$ )



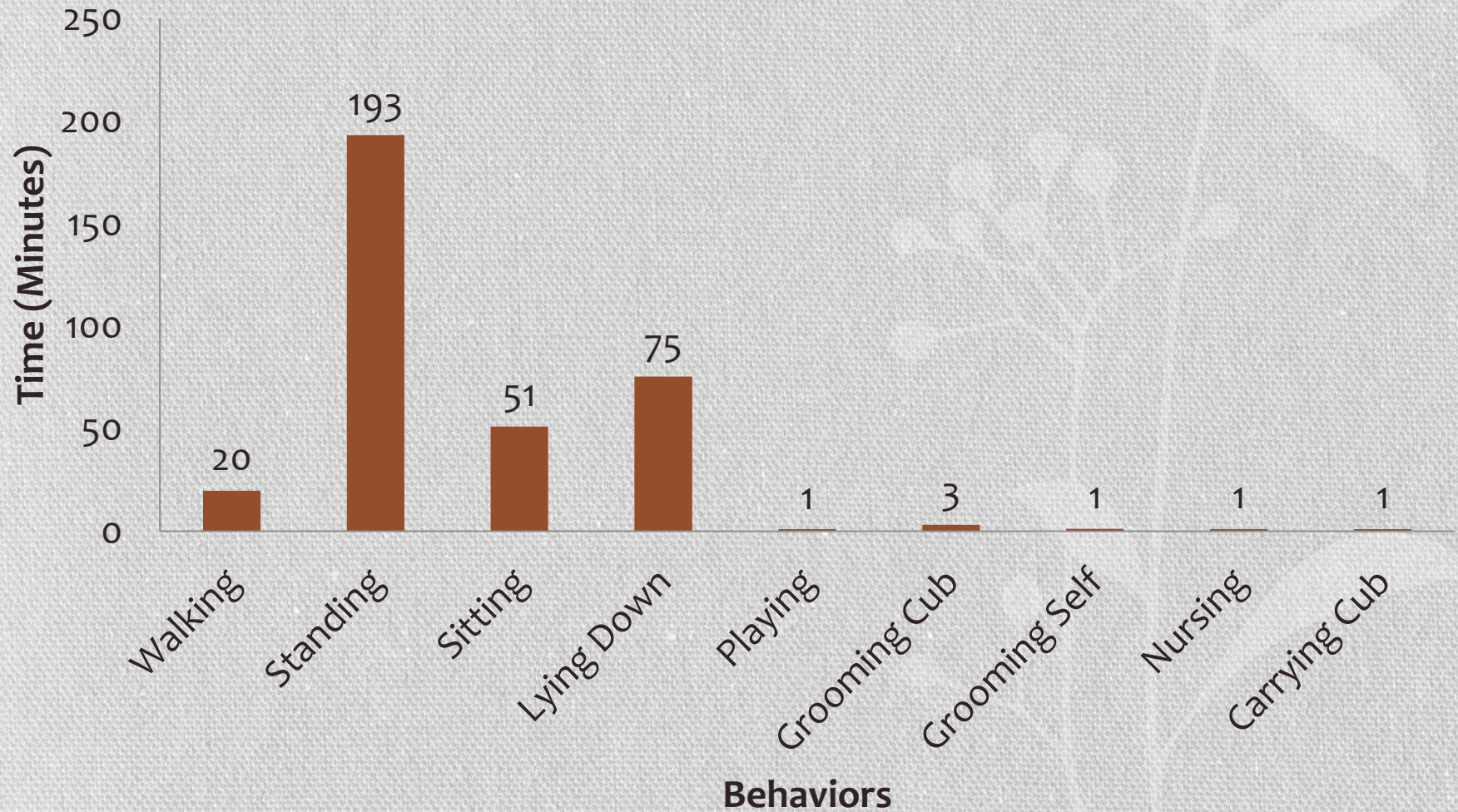
# Time Spent Out of Den by Exit Number

( $n = 1$ )



# Activity Budgets

( $n = 1$ )



# Overnight Stays

- 2 bears with cubs



# Dens with Yearlings

2012-03-11 12:48:32 PM M 1/2

13°C



CAM95

RECONYX

2012-03-11 2:47:22 PM M 1/2



6°C



CAM95

RECONYX

2012-03-11 2:49:23 PM M 1/2



6°C



CAM95

RECONYX

# How long do they stay?

- Energy Costs
  - Camera 157 (2011)
  - Camera 95 (2012)
- Potential Predators
  - Camera 111 (2011)
  - Camera 117 (2011)
  - Camera 3 (2011)
  - Camera 95 (2012)



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