



General Locations of
Lynx (*Lynx canadensis*)
Reintroduced to
Southwestern Colorado
from February 4, 1999
through February 1, 2005

Report for:
The Colorado Division of Wildlife

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April 2005

Introduction

From Feb 4, 1999 through May 2004, 166 lynx were reintroduced to southwestern Colorado. To provide information to natural resource professionals, and the general public on areas used by these lynx, a series of lynx location maps were generated. In this document, we provide maps documenting all lynx locations throughout Colorado and southeastern Wyoming and all locations of lynx within each of the National Forests in Colorado and southeastern Wyoming.

Methods

We generated 10 maps to document areas used by lynx. All of the maps used the same data but were presented with different backgrounds and/or depicted each of the 8 national forests in Colorado and southeastern Wyoming (San Juan, Rio Grande, Routt, Grand Mesa-Uncompahgre, Arapahoe-Roosevelt, White River, Pike-San Isabel and Medicine Bow). All maps were composites of all lynx locations obtained from both VHF and satellite radio-transmitters placed on lynx from February 4, 1999 through February 1, 2005. Aerial locations were obtained from daytime flights conducted to locate lynx by their VHF transmitters. VHF transmitters have been used on lynx since the first lynx were released in February 1999. Satellite transmitters were first used on lynx in April 2000 in combination with the VHF transmitters. The satellite transmitters were designed to provide locations on a weekly basis for 18 months.

Accuracy of both aerial and satellite locations vary with the environmental conditions at the time the location is obtained. Satellite location accuracy is also influenced by atmospheric conditions and position of the satellites. Satellite location accuracy can range from 150 m -10 km. Weekly locations are not always obtained if environmental conditions interfere with the signals. Accuracy of aerial locations is primarily influenced by weather with accuracy ranging from 50-500 meters. Aerial locations are obtained for lynx within the core area on approximately a weekly basis. The core area is roughly defined as high elevation areas in the southwestern corner of Colorado bounded by Taylor Mesa on the west, the Gunnison basin on the north, Poncha Pass on the east and the New Mexico border on the south. Aerial locations are obtained for lynx outside the core area on an opportunistic basis, often only 1 location per 3 months.

Results

Lynx were located throughout the mountainous portions of Colorado (Fig. 1). Lynx were located on all 8 national forests in Colorado and southeastern Wyoming (Fig. 2). Number of lynx documented in a national forest decreased with increasing distance from the release sites, primarily located on the Rio Grande Forest (Table 1). Lynx locations on each of the 8 national forests are presented in more detail in Figures 3 – 10.

Table 1. Number of individual lynx located in each of eight National Forests in Colorado and southeastern Wyoming from February 4, 1999 – February 1, 2005.

National Forest	Number of Individual Lynx		
	Total	Documented from VHF Aerial Locations	Documented from Satellite Locations
Medicine Bow	9	4	7
Routt	10	4	8
Arapaho-Roosevelt	28	17	19
White River	43	27	33
Pike-San Isabel	55	29	43
Grand Mesa-Uncompahgre	121	86	92
San Juan	144	113	104
Rio Grande	161	157	111

Discussion

Lynx locations obtained from all 166 lynx released in Colorado from 1999 through 2004 as part of the Colorado lynx reintroduction program were displayed on a series of 10 maps. These composite maps include all locations obtained from both aerial searches for VHF radio signals and from transmissions to satellites from the satellite transmitters. These maps were provided to document general areas used by lynx throughout Colorado and southeastern Wyoming, in particular documenting lynx use of national forests (Table 1).

Areas of high use over the 5-year period were identified by many overlapping points and reflect current areas of high use by surviving lynx. However, areas with few points are not necessarily indicative of poor habitat but might rather reflect low densities of lynx beyond their release locations in southwestern Colorado.

These maps provide information on areas of lynx use. Detailed analyses describing the vegetative and landscape characteristics of high use areas will be available upon completion of additional project segments.

Disclaimer

This document should not be used or construed as an assessment on specific lynx habitat requirements nor selection of habitat of reintroduced lynx in Colorado or Wyoming. The Colorado Division of Wildlife is in the process of analyzing specific habitat use areas based on a variety of techniques. Rather, these maps simply depict general areas where reintroduced lynx have traveled through or are using on a more regular basis.

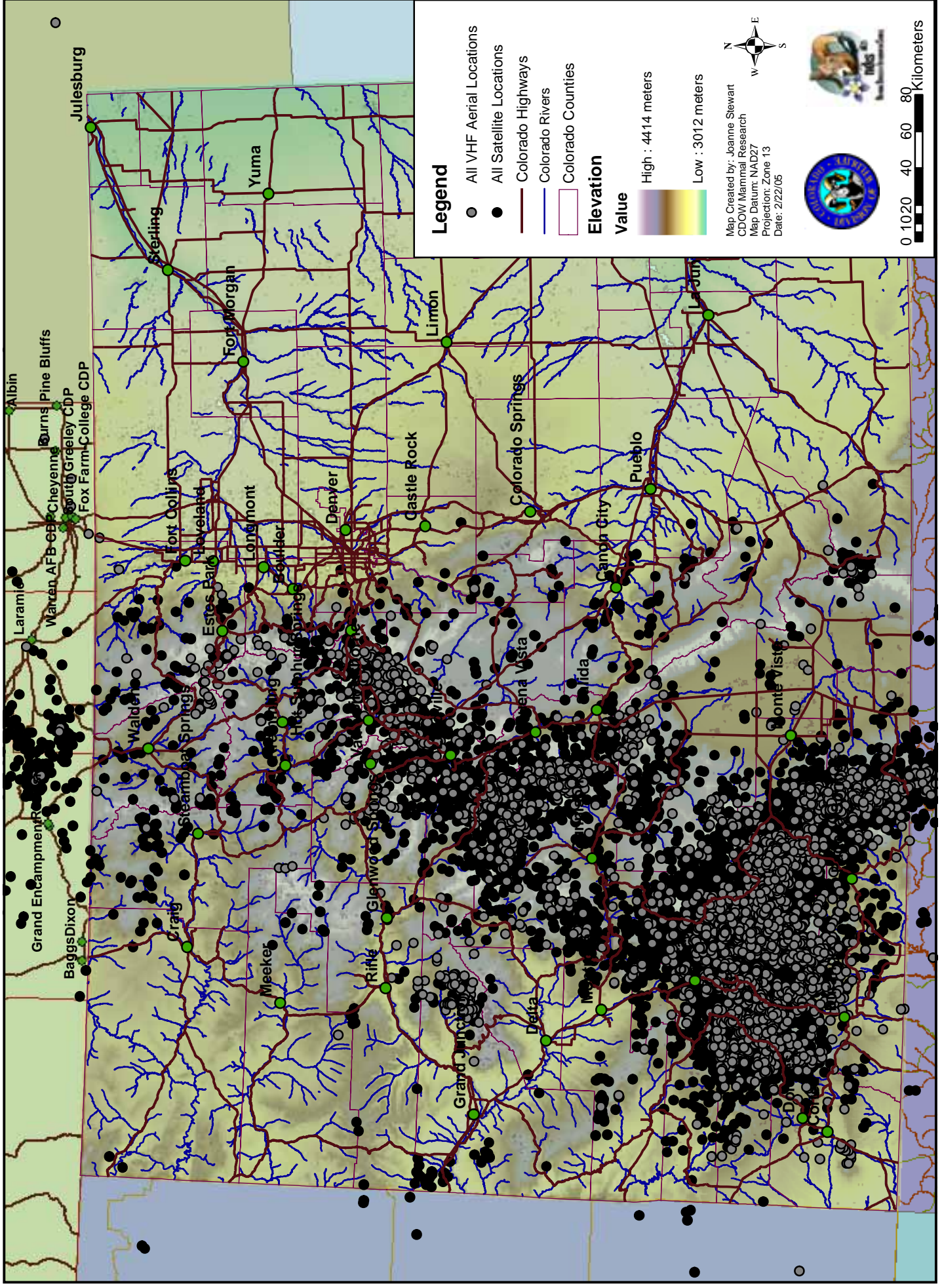


Figure 1. All lynx locations within Colorado: February 4, 1999 - February 1, 2005

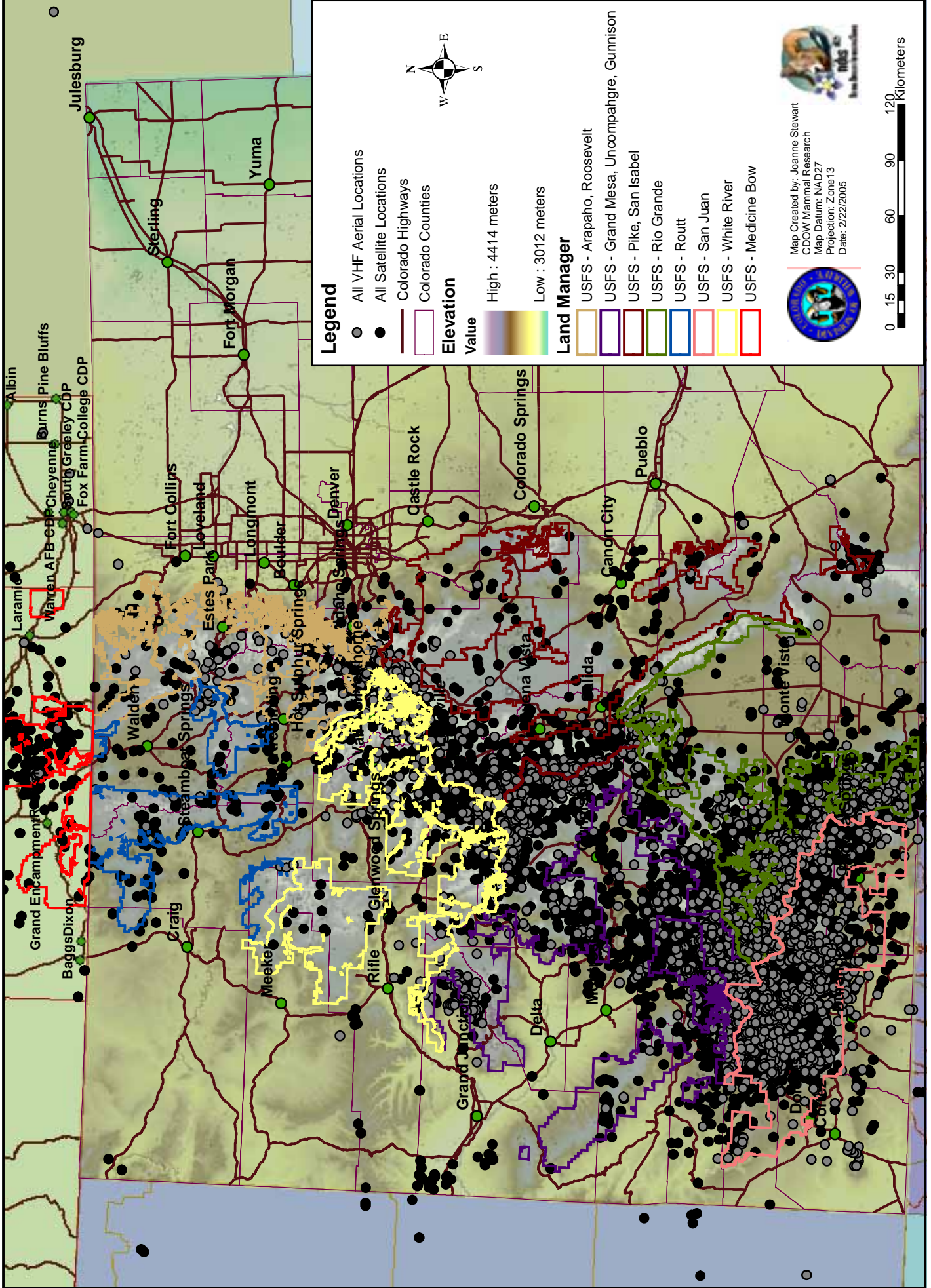


Figure 2. All lynx locations in Colorado with National Forest Boundaries: February 4, 1999 - February 1, 2005

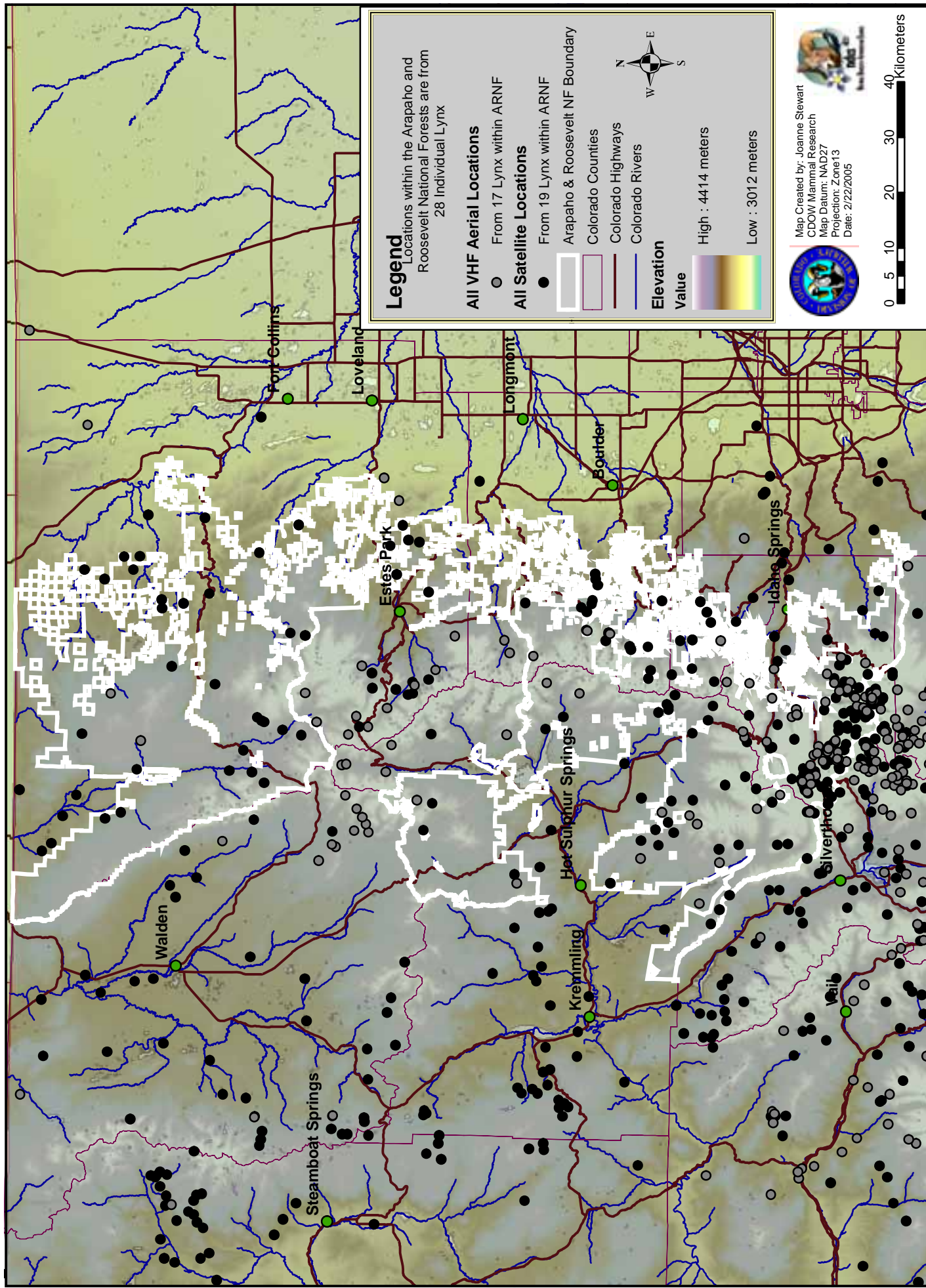


Figure 3. All lynx locations within the Arapaho and Roosevelt National Forests: February 4, 1999 - February 1, 2005

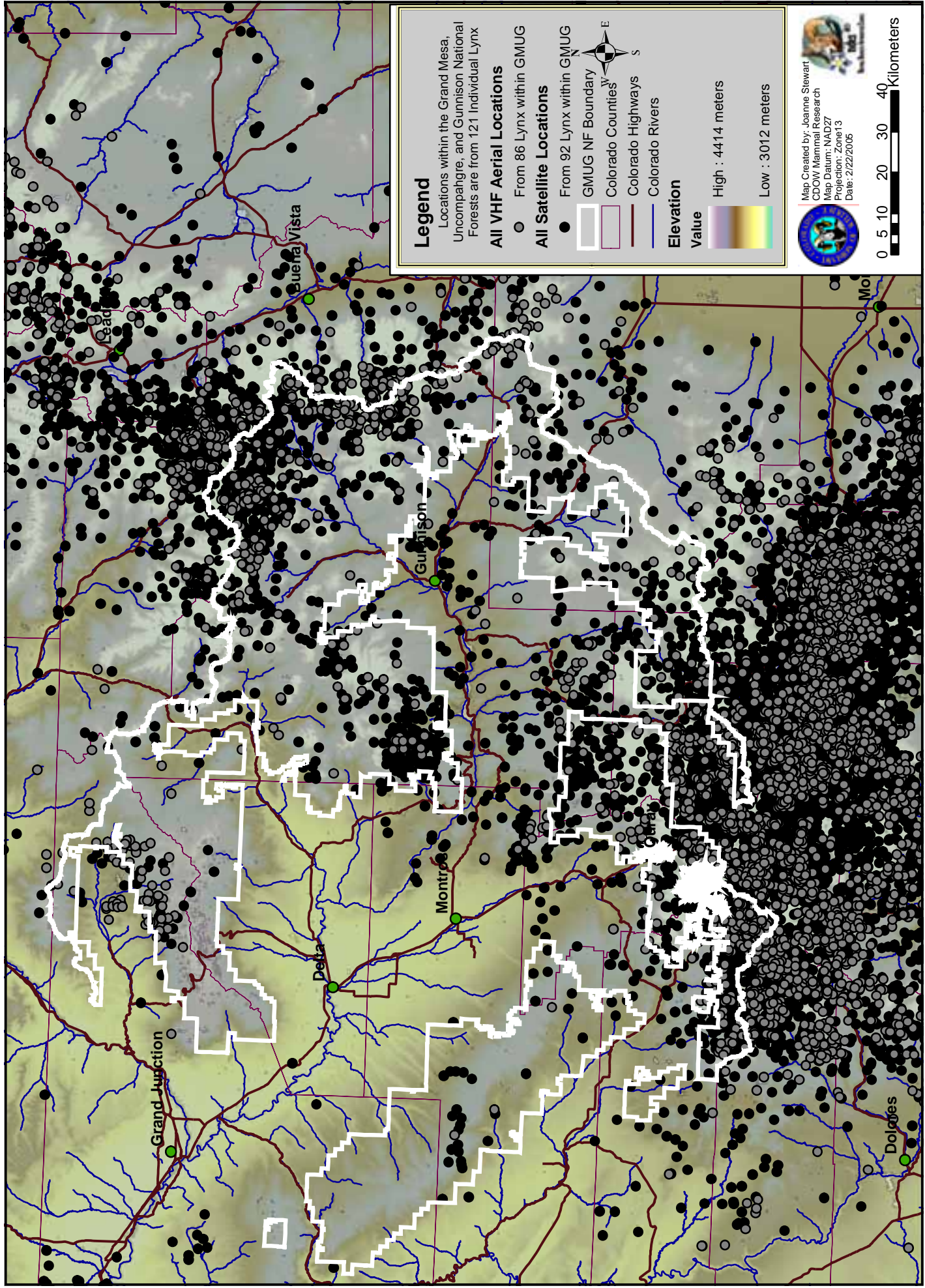


Figure 4. All lynx locations within the Grand Mesa, Uncompahgre, and Gunnison National Forests: February 4, 1999 - February 1, 2005.

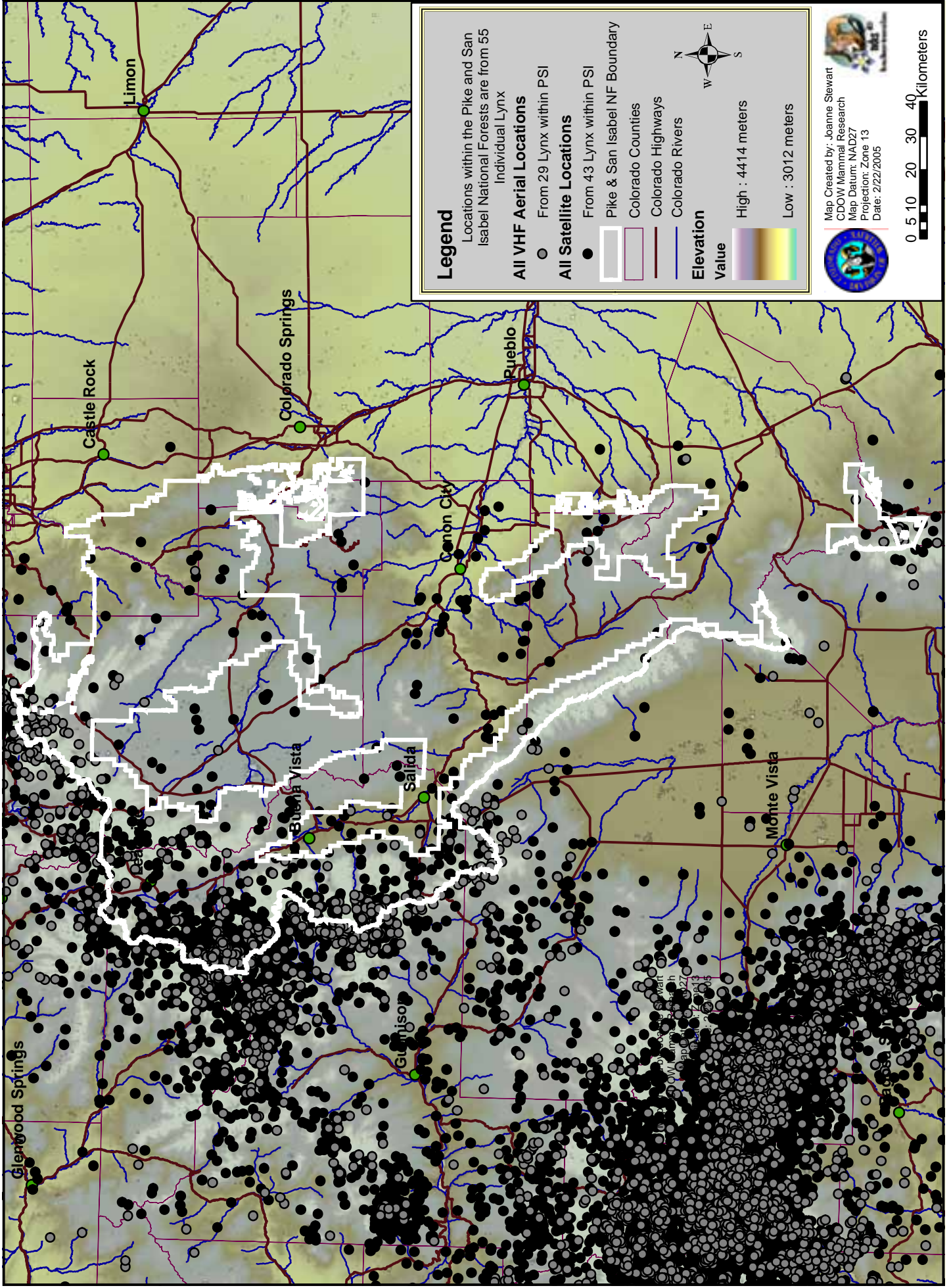


Figure 5. All lynx locations within the Pike and San Isabel National Forests: February 4, 1999 - February 1, 2005

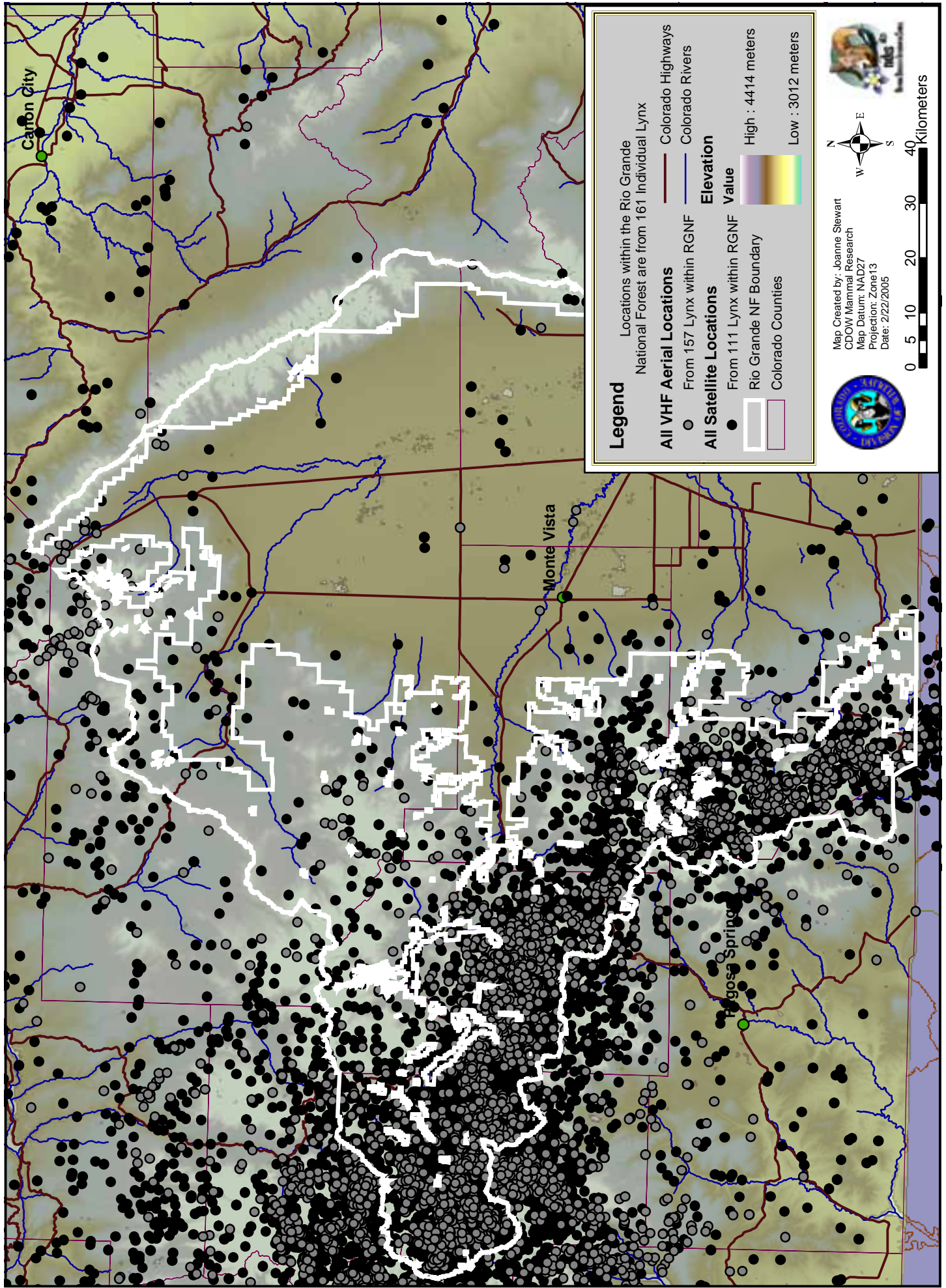


Figure 6. All lynx locations within the Rio Grande National Forest: February 4, 1999 - February 1, 2005.

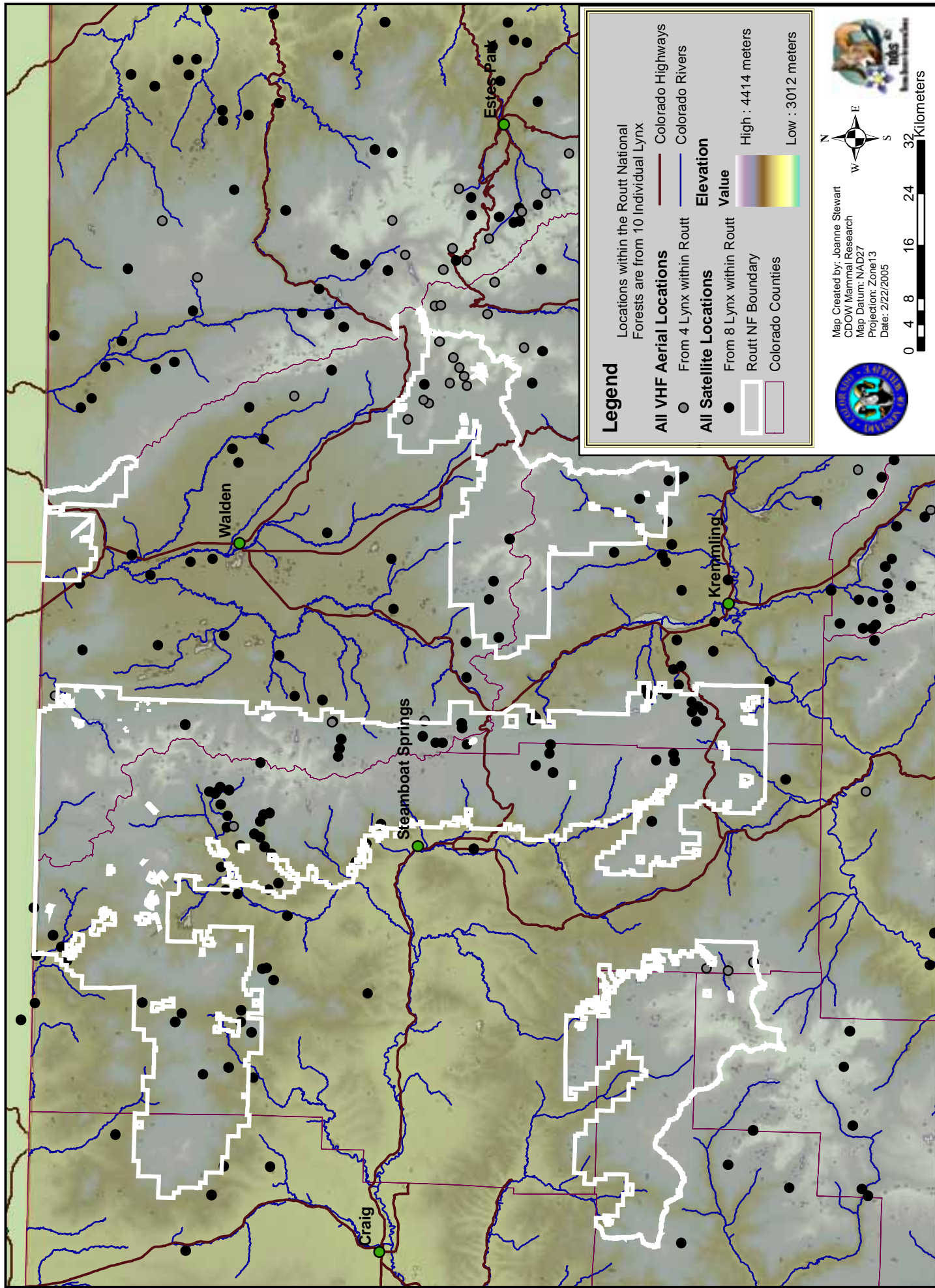


Figure 7. All lynx locations within the Routt National Forest: February 4, 1999 - February 1, 2005.

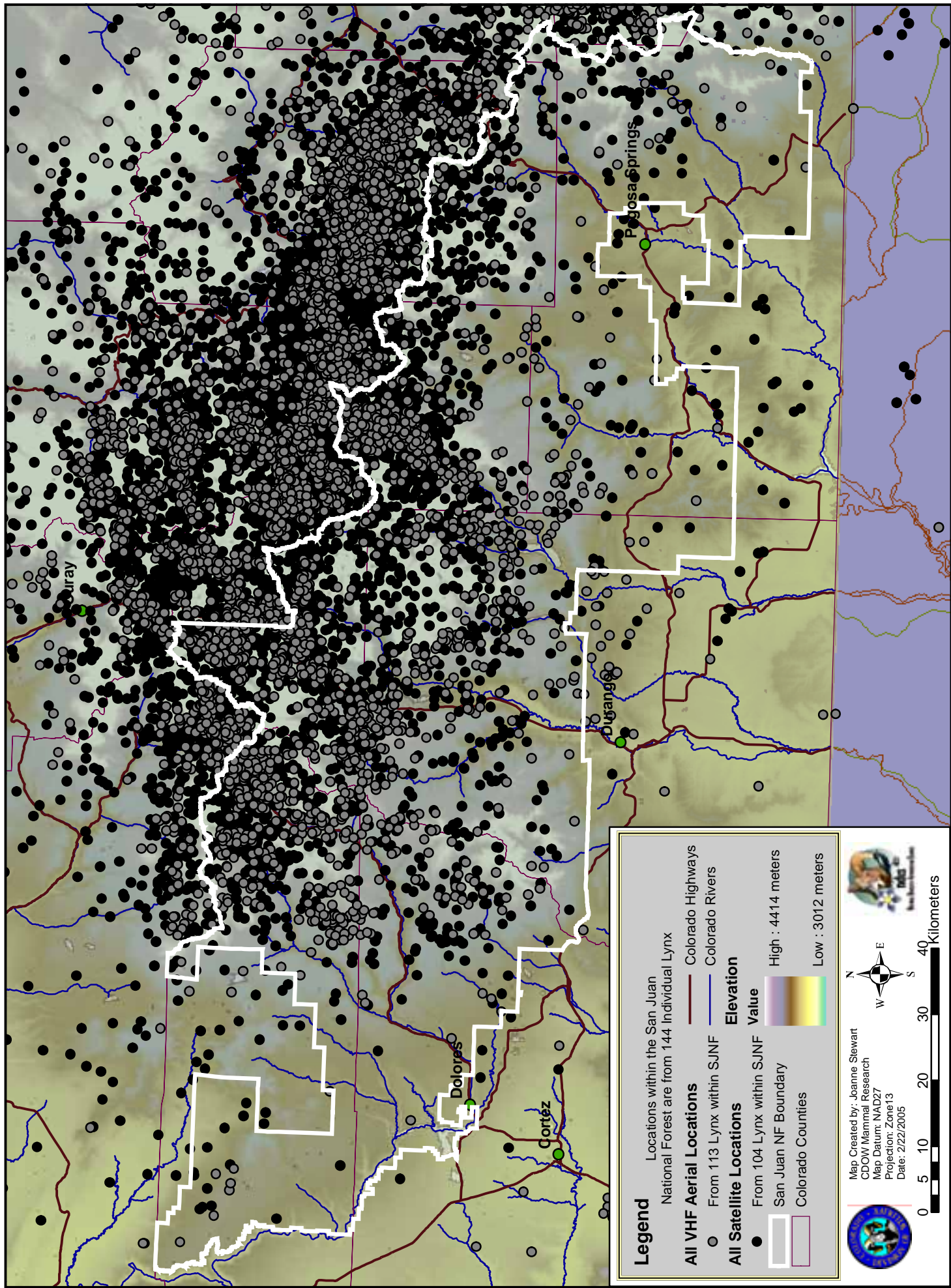


Figure 8. All lynx locations within the San Juan National Forest: February 4, 1999 - February 1, 2005.

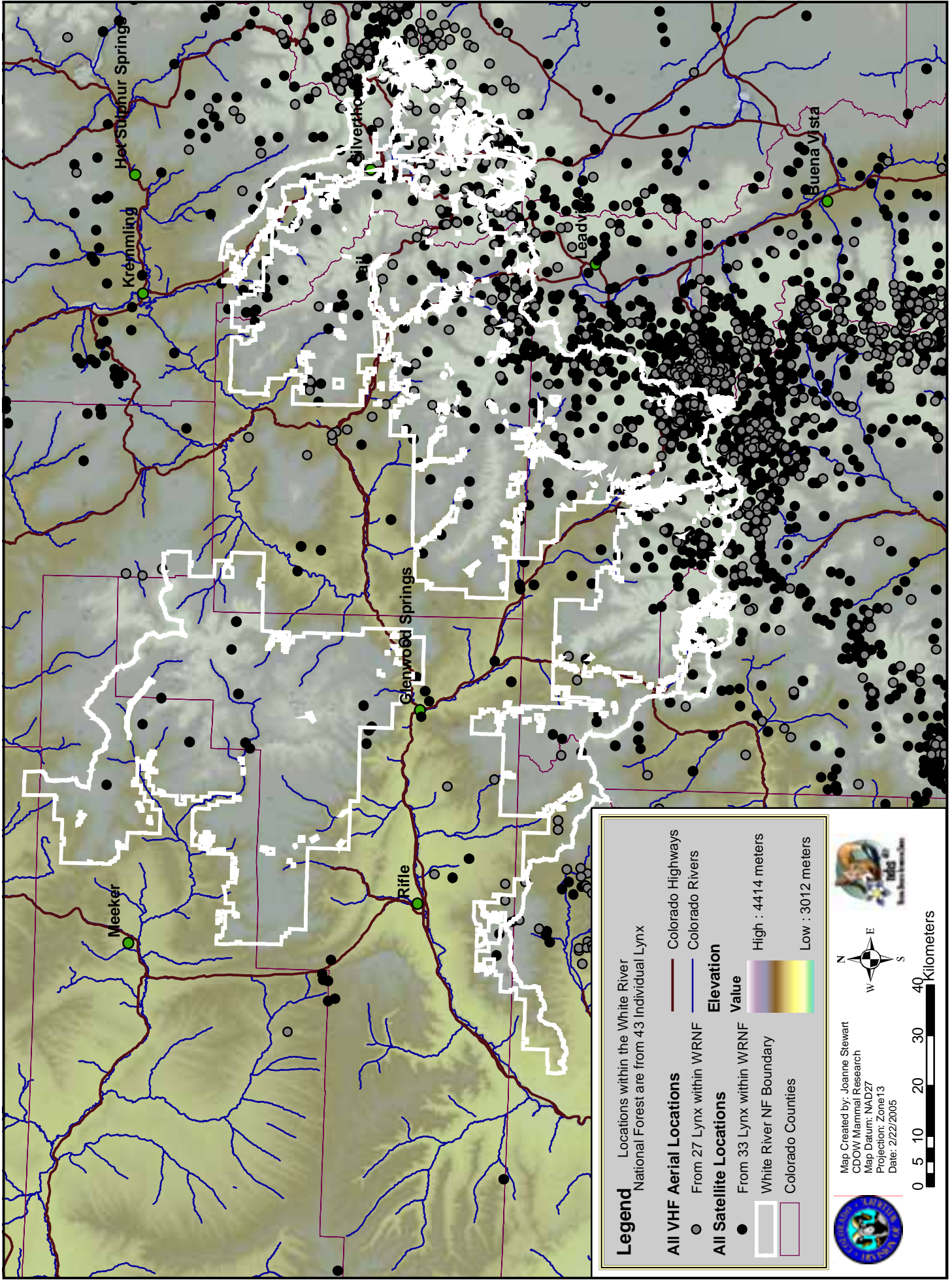


Figure 9. All lynx locations within the White River National Forest: February 4, 1999 - February 1, 2005.

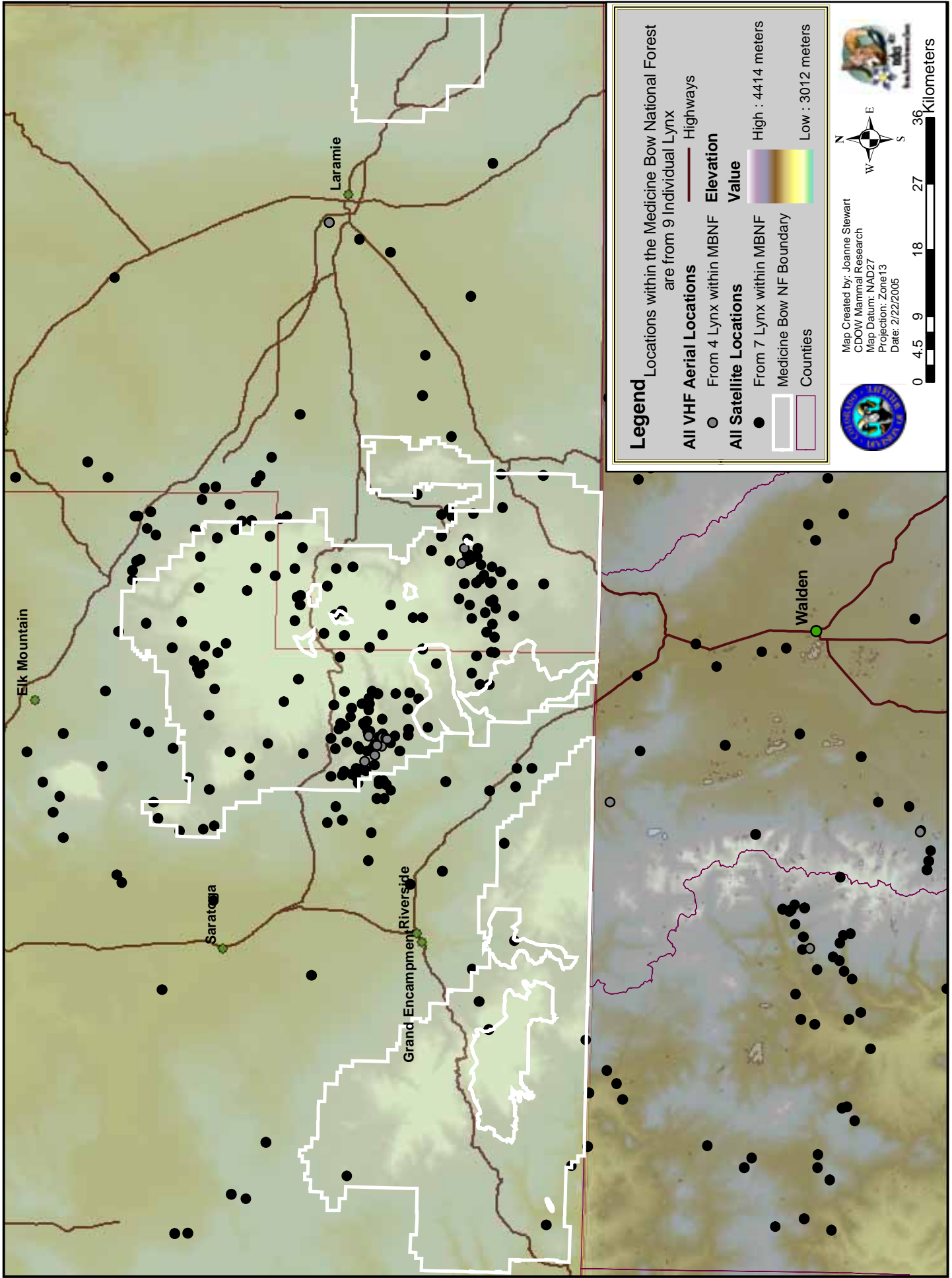


Figure 10. All lynx locations within the Medicine Bow National Forest: February 4, 1999 - February 1, 2005.