January 3, 2011

RE: Track Photos submitted by [redacted]
Track were found [redacted], Wisconsin, month and day unknown, 2010
Suspicion that the tracks were made by a cougar

Conclusion: Footprints and trail were made by a large canid. Evidence is consistent with a domestic dog. Evidence strongly suggests footprints were neither made by a cougar nor another felid. While evidence does not rule out a wolf, clues suggest a domestic dog origin.

Quality of evidence: Photos are good. Tracks are in loose, dry sand causing details to be obscured. All toes are present but direct registry is difficult to verify in close-up photos due sliding of sand back into footprints. Gait may not be determined because photos do not have enough footprints in a row to verify gait identification.

Evidence Summary: We use over 30 criteria to test for a cougar origin. Because of the loose, dry sand substrate some criteria were not be visible or helpful in these photos. Listed below are key criteria used in this identification.

Footprints:

The most important and definitive clue is the anterior interdigital pad slope. This is particularly apparent in photos 003 and 005 but is also visible in most of the photos. The interdigital pad of a cougar slopes to the anterior end and is deep whereas the interdigital pad of a canid slopes to the posterior end and is shallow on the anterior end. In this case the slope is to the posterior end of the interdigital pad. I have marked photo 003 to show the shallow anterior end of the interdigital, a definitive characteristic of canids.

The gap (distance between the anterior edge of the interdigital pad and the center toes) of a cougar is small as the interdigital pad is relatively large in the footprint. The gap in canid footprint is relatively large. In these tracks the gap is large indicative of a canid (photo 003).

The anterior edge of the interdigital pad of a cat has two lobes while that of a dog has one lobe. These tracks have but one lobe consistent with a canid (photos 003 and 005).

The shape of the toe arc (line drawn connecting the tips of toes) of cougars is a flat lopsided arc (see photo 007) and that of the dog is a stepped rectangular outline. Toes in photos arc stepped and the distinct angle above the outside toes is evident in the step shape. Additionally toes (inside with inside and outside with outside) are paired as in a felid but not arced as in a cat.

Both outer toes on the suspect footprints appear similar in size where as those of a cougar are substantially different in size, again suggesting canid.

Lack of claws is not significant in this case because of the sliding loose sand which can obliterate fine details and also the fact that the larger the dog, the less likely claws are to show in footprints.

Gaits:

Since the photos do not definitively show the required minimum of five footprints, it is not possible to positively identify the gait. There is an appearance of a walking or trotting gait. If this assumption is correct then the stride is roughly estimated at (no scale is present in the gait photos) 35 inches. This would be consistent with a either a canid or a cougar using a walking gait.

Behaviorally it would be unusual for a cougar to travel down an open road for much distance. If a cougar did travel on the road, I would expect it to trot (stride of 60 to 70 inches) and to exit the road quickly. Wolves on a road would likely trot (stride of 60 to 70 inches) not walk. These behavioral traits suggest a domestic dog.

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exhibits: photos 003, 005, 007