

Are Porcupines In Significant Decline Across The Sierra Nevada?



In recent years, field studies have added new information about existing populations of the Pacific fisher. From those studies, scientists and agency officials have gained an enhanced understanding of current threats to the species and their habitat.

One potentially important piece of information has not been carefully studied. **Is there any validity to the anecdotal decline in the abundance of porcupines, and if so, does it contribute to the lack of fishers in areas of previously occupied habitat?**

Since the porcupine has historically been a prey species for the fisher, the relative abundance or paucity of porcupines in historic fisher habitat could be one factor that affects the fisher.

Accordingly, to attempt to fill the gap of information about the porcupine's current status, CSERC initiated a yearlong effort to collect reports of porcupine sightings in the region that stretches from Lake Tahoe south through the southern

end of the Sierra Nevada. CSERC communicated to U.S. Forest Service, Park Service, and State Fish and Game personnel to ask for any and all reports of sightings. CSERC also shared requests for porcupine sightings with CSERC members and their extended contacts.

Those observing a porcupine or a road kill were asked to provide the following:

- A) Time and date of sighting
- B) Specific location of sighting, as detailed as possible
- C) Any description of porcupine behavior observed
- D) If a road-kill, a description of the road condition, speed limit, etc.
- E) A photo, if possible

As the data in this report shows, across millions of acres of public and private lands in the central and southern Sierra Nevada region, only 14 live porcupines were reported in 2011 (with three 2010 sightings added in the report for a total of 17 live sightings overall). A total of 8 road kill porcupines were also reported.

This extremely low level of reported sightings is consistent with CSERC staff hearing from experienced federal field employees (who have spent decades in Yosemite Park or in national forests) that they have never seen a single live porcupine. The majority of agency wildlife staff questioned about porcupines openly acknowledged that they had never personally seen one. Thus, there may be value from an agency or graduate student doing a research assessment to more intensively determine presence and abundance of porcupine within the Sierra Nevada region.

Porcupine (*Erethizon dorsatum*) Sightings Reported to CSERC in 2011

(3 sightings from 2010; 22 sightings reported in 2011)

Date	Location	Elev. (ft)	Time of sighting	Alive/Dead	Adult/Juvenile	Contact info/Notes
June 15, 2010	¼ mile west of Piute Meadow in the Emigrant Wilderness, Stanislaus National Forest, CA UTM (NAD 83) - Easting: 250843 Zone 11 Northing: 4227376	~7,850	Un-known	Alive	Juvenile	Sighting by Greg Harford
Aug 18, 2010	East side of Pingree Lake in the Emigrant Wilderness, Stanislaus National Forest, CA. UTM (NAD 83) - Easting: 254974 Zone 11 Northing: 4224351	~8,100	Early evening	Alive	Juvenile	Sighting by Dick Chimenti
October 2010	Hwy 49 to New Melones Reservoir on the Tuolumne County side of the bridge, crossing Reynolds Ferry Rd. UTM (NAD 83) - Easting: 721554 Zone 11 Northing: 4207853	~1,150	Un-known	Alive (crossing road)	Adult	Sighting by Nathan Graveline Habitat is primarily dense chaparral.
May 20, 2011	Road 222, near Bass Lake, Sierra National Forest, CA UTM (NAD 83) - Easting: 275204 Zone 11 Northing: 4129613	~3,400	22:45	Alive (crossing road)	Adult	Sighting by Melissa McAteer
May 29, 2011	Above Cascade Falls, South/West Lake Tahoe, Tahoe National Forest, CA UTM (NAD 83) - Easting: 751157 Zone 10 Northing: 4313461	~6,900	13:00	Alive (crossing rocky terrain)	Adult (~3' long from head to tail)	Sighting by Steve Pate
June 2, 2011	East side of HWY 89, just south of Alpine Meadows Rd in Tahoe, Tahoe National Forest, CA (Speed Limit - 45 MPG) UTM (NAD 83) - Easting: 742982 Zone 10 Northing: 4339555	~6,200	NA	Dead (road kill)	Adult	Sighting by T. Will Richardson, Ph.D.

Date	Location	Elev. (ft)	Time of sighting	Alive/ Dead	Adult/ Juvenile	Contact info/Notes
June 11, 2011	Highway 4, one mile west of Forest Road 7N09 in the Stanislaus National Forest. UTM (NAD 83) - Easting: 748838 Zone: 10 Northing: 4255012	~6,800	22:30	Alive (crossing road)	Adult	Sighting by Maureen Forney
July 7, 2011	Hwy 89, north of Emerald Bay in Tahoe, Tahoe National Forest, CA (Speed Limit - 50 MPG) UTM (NAD 83) - Easting: 751450 Zone 10 Northing: 4317235	~6,750	NA	Dead (road kill)	Juvenile	Sighting by T. Will Richardson, Ph.D.
July 30, 2011	Agnew Meadows, Devils Postpile National Monument, near Mammoth Lakes, CA UTM (NAD 83) - Easting: 315998 Zone 11 Northing: 4166769	~7,500	Un-known	Alive (two animals were seen together)	Unknown	Sighting reported second hand by Heather Campbell. Two porcupines were seen by her friend
August 2011	Washburn Lake, Yosemite National Park, CA (in the shallows of the north-northwest end of lake) UTM (NAD 83) - Easting: 290739 Zone 11 Northing: 4177203	~7,600	NA	Dead (In water)	Adult	Sighting by David Wright
August 2011	Paige Meadows near Sunnyside-Tahoe, Tahoe National Forest, CA. Found by dog, UTM (NAD 83) - Easting: 744835 Zone 10 Northing: 4337608	~6,800	Un-known	Alive (Climbed a tree)	Adult	Sighting by Flavia Sordelet
Aug 20 & Aug 21, 2011	11345 Silver Lane, Stagecoach, NV 89429 (~24 miles east of Carson City) UTM (NAD 83) - Easting: 291182 Zone 11 Northing: 4357251	~4,300	Dusk and 03:00	Alive (Up a blue spruce tree)	Juvenile ~18" long	Sighting by Willis Lamm in his garden at dusk on 8/20 and later that night at 3:00 am. Dogs were quilled. Except for landscape plants, the area is sage covered desert for miles around.

Date	Location	Elev. (ft)	Time of sighting	Alive/ Dead	Adult/ Juvenile	Contact info/Notes
Aug 31, 2011	Country Club Dr. in the Burton Creek State Park, Tahoe National Forest, CA. Found by dog. UTM (NAD 83) - Easting: 749939 Zone 10 Northing: 4342605	~6,500	Un-known	Alive (hiding in heavy brush)	Adult (medium sized)	Sighting by Flavia Sordelet
Sept 2, 2011	Stanislaus National Forest, Porcupine was seen off of HWY 108/Sonora Pass (Speed Limit - 45 MPG) UTM (NAD 83) - Easting: 266514 Zone 11 Northing: 4244643	~8,500	NA	Dead (Road kill)	Adult	Sighting by John Buckley and Heather Campbell Contact: (209) 586 - 7440 johnb@cserc.org , heatherc@cserc.org
Sept 3, 2011	Stanislaus National Forest, Porcupine photographed at a CSERC wildlife camera station off the Saint Mary's Pass Trailhead, in a whitebark pine stand, near drainage with willows. UTM (NAD 83) - Easting: 267507 Zone 11 Northing: 4250527	~9,700	04:43	Alive	Adult	Photographed by CSERC wildlife camera station Contact: lindseym@cserc.org johnb@cserc.org (209) 586-7440
Sept 16, 2011	Stanislaus National Forest, Porcupine was seen 3 miles before the end of Clarks Fork Rd. UTM (NAD 83) - Easting: 256618 Zone 11 Northing: 4254362	~6,200	Evening	Alive	Unknown (likely adult)	Sighting reported second hand by Jim Maddox. Reports received at the Long Barn Check Station by deer hunters.
Sept 17, 2011	Stanislaus National Forest, Porcupine was seen near the Disaster Peak Trailhead at the end of Clarks Fork Rd. UTM (NAD 83) - Easting: 259365 Zone 11 Northing: 4255799	~6,500	Day-break	Alive	Unknown (likely adult)	Sighting reported second hand by Jim Maddox. Reports received at the Long Barn Check Station by deer hunters. The 9/16 and 9/17 sightings by hunters are about ~3 miles apart, so this could be the same porcupine.
Sept 17, 2011	Southeast side of Big Meadows near Hunter Creek Trail in the Mount Rose Wilderness, Tahoe National Forest, CA UTM (NAD 83) - Easting: 246111 Zone 11 Northing: 4368423	~8,700	13:30	Alive (foraging in a marshy area)	Adult	Sighting by Jason Bell

Date	Location	Elev. (ft)	Time of sighting	Alive/ Dead	Adult/ Juvenile	Contact info/Notes
Sept 18, 2011	1545 Vivian Lane, Incline Village, NV 89451 (just inland from north shore Lake Tahoe) (Speed Limit – 45 MPG) UTM (NAD 83) - Easting: 246543 Zone 11 Northing: 4347074	~6,300	07:30 – 19:00	Alive (In front yard, hiding in bush)	Adult	Sighting by Diane Martinez in her front yard at 7:30 am, did not leave her yard till 7:00 pm that evening. Found by dog.
Sept 24, 2011	Hwy 28, just past Rocky Ridge Rd in Tahoe UTM (NAD 83) - Easting: 748206 Zone 10 Northing: 4340962	~6,300	NA	Dead (road kill)	Adult (large)	Sighting by T. Will Richardson, Ph.D.
Sept 24, 2011	HWY 89, south of Alpine Meadows Rd in Tahoe (~ about a half mile south of the road kill porcupine from June 2) Tahoe National Forest, CA (Speed Limit – 45 MPG) UTM (NAD 83) - Easting: 742467 Zone 10 Northing: 4340610	~6,300	NA	Dead (road kill)	Juvenile	Sighting by T. Will Richardson, Ph.D.
Sept 28, 2011	Hwy 80, ~ 4 miles NE of Truckee, CA (Speed Limit – 45 MPG) UTM (NAD 83) - Easting: 747765 Zone 10 Northing: 4360994	~5,800	NA	Dead (road kill)	Juvenile	Sighting by T. Will Richardson, Ph.D.
Sept 29, 2011	Hwy 267, about halfway between Lake Tahoe and Truckee. Tahoe National Forest, CA (Speed Limit – 45 MPG) UTM (NAD 83) - Easting: 749822 Zone 10 Northing: 4353237	~6,050	NA	Dead (road kill)	Adult (mid sized)	Sighting by T. Will Richardson, Ph.D.
Oct 25, 2011	Hwy 40, near Sugar Bowl Ski Resort, Tahoe National Forest, CA UTM (NAD 83) - Easting: 728890 Zone 10 Northing: 4355056	~7,150	14:00	Alive (walking along rd.)	Adult	Sighting by Jenna Curcio

Summary of results by location:

Location	# of live porcupine sightings	# of road kill sightings
Tahoe National Forest and local vicinity	6	6
Stanislaus National Forest	6	1
Yosemite National Park	0	1 (Was not road kill)
Sierra National Forest	1	0
Tuolumne County foothills	1	0
Desert	1	0
Mammoth Lakes	2	0
Total	17	8

Summary of results by elevation:

Elevation	# of porcupine sightings
1,000 – 2,000	1
2,000 – 3,000	0
3,000 – 4,000	1
4,000 – 5,000	1
5,000 – 6,000	1
6,000 – 7,000	12
7,000 – 8,000	5
8,000 – 9,000	3
9,000 – 10,000	1

Summary of results by month:

Month	# of porcupine sightings
January	0
February	0
March	0
April	0
May	2
June	3
July	3
August	5
September	10
October	2
November	0
December	0