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NEW RECORDS AND DISTRIBUTIONAL NOTES FOR REPTILES OF THE NEVADA TEST SITE¹

Wilmer W. Tanner²

In 1963 Tanner and Jorgensen published their study, "Reptiles of the Nevada Test Site," and listed twenty-eight species for the Test Site. Since then four summer of intensive ecological activity in several of the habitat areas of the Test Site have added three additional species and increased our understanding of others. Two of the added species were listed as probable species in 1963, but the third was quite unexpected.

Dipsosaurus dorsalis dorsalis Baird and Girard

Three additional specimens have been taken, two from the Larrea-Franseria community in Frenchman Flat (can traps) and one DOR in western Jackass Flat. Although more widely distributed than originally reported, this species still remains one of those less commonly observed on the Test Site.

Sceloporus graciosus graciosus Baird and Girard

The northern Sagebrush Lizard reaches its most southern limits in the uplands of southern Nevada. Records from Pahute Mesa are now available. In this area we find the Pinyon-Juniper forests with open areas of desert shrubs of which *Artemisia tridentata* is usually present.

An ecological point of interest is the occurrence of *Sceloporus occidentalis* at the summit of Rainier Mesa well above the distribution of *S. g. graciosus*. The three species of *Sceloporus* at NTS have little overlapping of their habitat areas. *Sceloporus magister* is found in the flats and particularly on the upper bajadas and foothills that surround the broad valleys. *Sceloporus graciosus* has been found in the lower limits of the Pinyon-Juniper Community and *Sceloporus occidentalis* seems to occur primarily in the Pinyon-Juniper Community with the greatest concentrations in the higher elevations such as Rainier Mesa. In a narrow area along the eastern base of Rainier Mesa both *magister* and *occidentalis* have been seen on boulders which line the road. There may be other areas where their habitats overlap; however, it is quite obvious that all three exist for the most part as single species populations within their own habitat niche.

The complete range of *Sceloporus graciosus* for the Test Site is not yet known. Its occurrence in the Pinyon-Juniper-Artemisia

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plant associations would indicate its occurrence wherever these plants predominate. This would place the range in the northern parts of NTS and extending northward into central Nevada.

Morphological (meristic) characters of the small series available does not indicate any important differences from those series seen from central Nevada and southwestern Utah.

Leptotyphlops humilis Baird and Girard

In spite of extensive field work and can traps placed in what appears to be favorable habitat, only one specimen has been found. On May 19, 1964, one specimen (BYU 23929) was taken in Rock Valley (NTS) by A. P. Aschwenden. It has a total length of 282 mm and a snout-vent length of 270 mm. There are 14 rows of dorsal and 282 scales in the dorsal row; head scales are normal except that the fifth dorsal is noticeably wider than is usual in *humilis*.

The nearness of NTS to southwestern Utah and the fact that a specimen taken at Indian Springs (Clark County) was identified as *utahensis* (La Rivers, 1942) leads one to suspect that the subspecies *utahensis* should be at the test site. An examination of the scale counts as listed above, however, places this specimen as an intergrade *humilis* x *utahensis*. The dorsals fall between these two subspecies (*humilis* 265-280; and *utahensis* 289-308) and the fourth dorsal is not divided but the fifth is much wider than the sixth. Such intermediate characters indicate that one might expect to find at NTS individuals which would key to either subspecies or be intermediate.

Diadophis punctatus regalis Baird and Girard

An adult female (BYU 31287) was taken on July 14, 1968, along Holmes Road one mile from its junction with Stockade Wash Road, Rainier Mesa, by James M. Hopkin and Wilmer W. Tanner. Its peculiar behavior of coiling its tail so as to show the bright Carnelian Red color (Ridgeway 1912) on the caudals led to its capture. The snake was actually on the shoulder of the road; however, as we approached, the vibration apparently initiated the above behavior permitting Mr. Hopkin to see it as we passed.

The color and color pattern does not vary from the few live specimens seen from southwestern Utah and is the same as previously reported by Tanner (1952) for a specimen from Washington County, Utah. The ventral scale count of 235 is noticeably higher than has been observed in previous specimens from Nevada and Utah, however, the caudal count is lower thus producing a ventral-caudal total of 301 scutes. This is comparable to other specimens seen from the range of *regalis*.

This record extends the range for this species approximately 250 miles southwest from its previous record near Caliente, Nevada and for at least 300 miles west of the nearest locality in northwestern Arizona.

The apparent extensive range of this species seems to be restricted to those habitats associated with the scrub oak, Pinyon-Juniper or some combination of these plant communities. In western Utah and adjoining eastern Nevada these plant communities occur primarily between 4,500 to 7,000 feet elevation. At the Nevada Test Site such plant communities occur at higher elevations with the Pinyon-Juniper at a near climax on the higher mountains and mesas.

This specimen was found on the south slope of Rainier Mesa at an elevation of approximately 6500 feet and well within the Pinyon-Juniper community. On the basis of its occurrence on Rainier Mesa, I would expect it to be found or at least to inhabit other similar adjoining areas, such as Pahute Mesa, and to extend north and northeast into central and eastern Nevada.

Masticophis taeniatus taeniatus Hallowell

In 1963 only three specimens of this species were recorded for the Test Site. At that time it was indicated that the scarcity of records was undoubtedly due to the lack of collecting in the more desirable areas. During the period from 1965 to 1968 (3½ summers) only three additional specimens have been taken and two seen DOR.

All records are from areas in or near the Juniper-Pinyon pine habitat. Our records would indicate that this species (subspecies) is at its southern limits in the higher elevations of the Nevada Test Site and we do not expect to find it in the desert valleys (Frenchman, Yucca, or Jackass Flats). Although this species is not what we might call a rare species, it is not a common one and may not be seen daily even though we traverse its habitat area.

Phyllorhynchus decurtatus parkinsi Klauber

We reported the first record of this species for Nye County, Nevada, in 1963 and indicated on the basis of the few specimens available (four) that it was perhaps one of the less common species on the Test Site. In the last few years, however, we have found this species to be one of the more common, particularly in the lower valleys. Certain areas in Frenchman, Mercury, and Jackass Flats have produced large series of specimens. We have noted that our greatest number of observations have occurred in those habitats where *Larrea* occurs as a part of the vegetative cover. It is now possible for us to provide a range of variation for some of the more common scale characters and these are as follows: Ventrals ♀♀, 10(178-190)183.5; caudals, 10(26-30)28.0. Ventrals ♂♂, 16(165-176) 170.9; caudals, 16(33-40)37.5. In both the males and the females it will be noted that the above scale counts average less than those reported by Klauber (1935). The color pattern is essentially as reported for NTS specimens in 1963.

Hypsiglena torquata deserticola Tanner

In 1963 a single specimen was reported for the Test Site. Since 1965 a series of this species has been found by driving the roads in the evenings. Present records show it not to be a rare species, particularly in the lower foothill and bajada areas of the Test Site. The scale counts and color pattern, especially the dorsal spots and the nape spots, are essentially as reported by Tanner (1946).

Trimorphodon lambda Cope

A second specimen of this species was taken approximately one mile north of the junction between the NLRD road and the connecting road from Mercury. It is a male with approximately the same scale counts as reported previously. We have made a determined effort to find additional specimens of this species using methods which have been successful in other areas by other workers. We, therefore, must conclude that it really is a rare species at the Test Site and that it perhaps is very near its most northern distribution limits.

Tantilla p. utahensis (Blanchard)

A third specimen of this species was taken at Cane Springs in a can trap, 31 August, 1968. It is an adult male specimen with scale patterns that fit nicely into the averages as presented by Tanner in 1966. We are still not certain as to the abundance of this species but suspect that it is more common than our collecting records would indicate, particularly in the rocky foothills and gravelly bajadas. This specimen was taken on a rocky northeast slope.

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