

July 17, 1992

Wildlife Biologist, Ft. Niobrara - Valentine NWR Complex

American Burying Beetle Site Records - Valentine NWR

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The following are specific site records of American Burying Beetles on Valentine NWR, to date, on Valentine NWR:

- (1) April 29, 1992 - SW 1/4 Sec. 30, T.30 N., R.27 W. near North Marsh Lake (H.U. 18B4). Found dead (dried up) under an over turned aluminum boat--specimen was partly consumed. Specimen forwarded to W. Jobman, FWE-G. Island, NE.
- (2) June 7, 1992 - NE 1/4 SW 1/4 Sec. 28, T.30 N., R.28 W. near Dewey Lake (H.U. 16A1). Collected in pit fall trap and released alive on site by Mike Shipman and Mylea Petersburg, FWS-NERC.
- (3) June 7, 1992 - NE 1/4 Sec. 33, T.30 N., R.28 W. near Dewey Lake (H.U. 16B1). Collected in pit fall trap and released alive on site by Mike Shipman and Mylea Petersburg, FWS-NERC.
- (4) July 10, 1992 - SW 1/4 Sec. 4, T.29 N., R.27 W. near South Marsh Lake (H.U. 21B2). Collected in reptile funnel trap and was found dead/stuck in 1/4" woven mesh screen. Collected by Rich Sterry, Range Tech., Valentine NWR. Specimen frozen/stored at Valentine NWR.
- (5) July 13, 1992 - SE 1/4 NE 1/4 Sec. 6, T.29 N., R.27 W. near Middle Marsh Lake (H.U. 18C1). Found prematurely dead in reptile funnel trap by Bill Matthews, Range Tech., Valentine NWR. Dead snake carcass also in funnel trap. Specimen frozen/stored at Valentine NWR.
- (6) July 13, 1992 - NW 1/4 SW 1/4 Sec. 32, T.30 N., R.27 W. near Middle Marsh Lake (H.U. 18C1). Found prematurely dead in reptile funnel trap by Bill Matthews, Range Tech., Valentine NWR. There was no animals in the funnel trap to attract the beetle into the reptile trap. Specimen frozen/stored at Valentine NWR.

It is obvious that the reptile funnel traps pose a hazard to individual American burying beetles and, as of this date, all reptile trap top doors have been opened to allow the beetles to escape.

In 1985 refuge personnel initiated reptile (bullsnake) trapping activities in H.U. 18C1 and H.U. 21B2; and since 1986 a similar annual trapping effort has been carried out. In 1988 refuge staff began checking the reptile traps for American burying beetles; however, none were observed until this year. The following is

the documented summary of the trapping effort in these two units (total 322 acres). Presently, 5,980 ft. of lead with 157 double funnel holding cages are in the field, which represents a significant trapping effort.

	<u>1992*</u>	<u>1991</u>	<u>1990</u>	<u>1989</u>
Trap-days:	4544.8	9,443.2	8,340.0	7,734.8

* - 1992 through July 15

** - Trap-day = 100 foot of lead set per day

There are several modifications that can be made to the trapping effort to reduce the incidence of capturing American burying beetles. However, those efforts were not previously accomplished primarily to document if the American burying beetle did, in fact, occur in this area of Nebraska. This rationale was based upon the documented range of the species and the fact that considerable numbers of a similar species (the one without the orange on the pronotum and head) were regularly observed in the reptile traps and were not experiencing mortality.

Based upon the records obtained this year on Valentine NWR there is a high probability that this species is more common within this area than previously documented; but, an increased survey effort needs to be accomplished. We need to discuss this aspect as well as an Intra-Service Consultation in the near future.

Len McDaniel

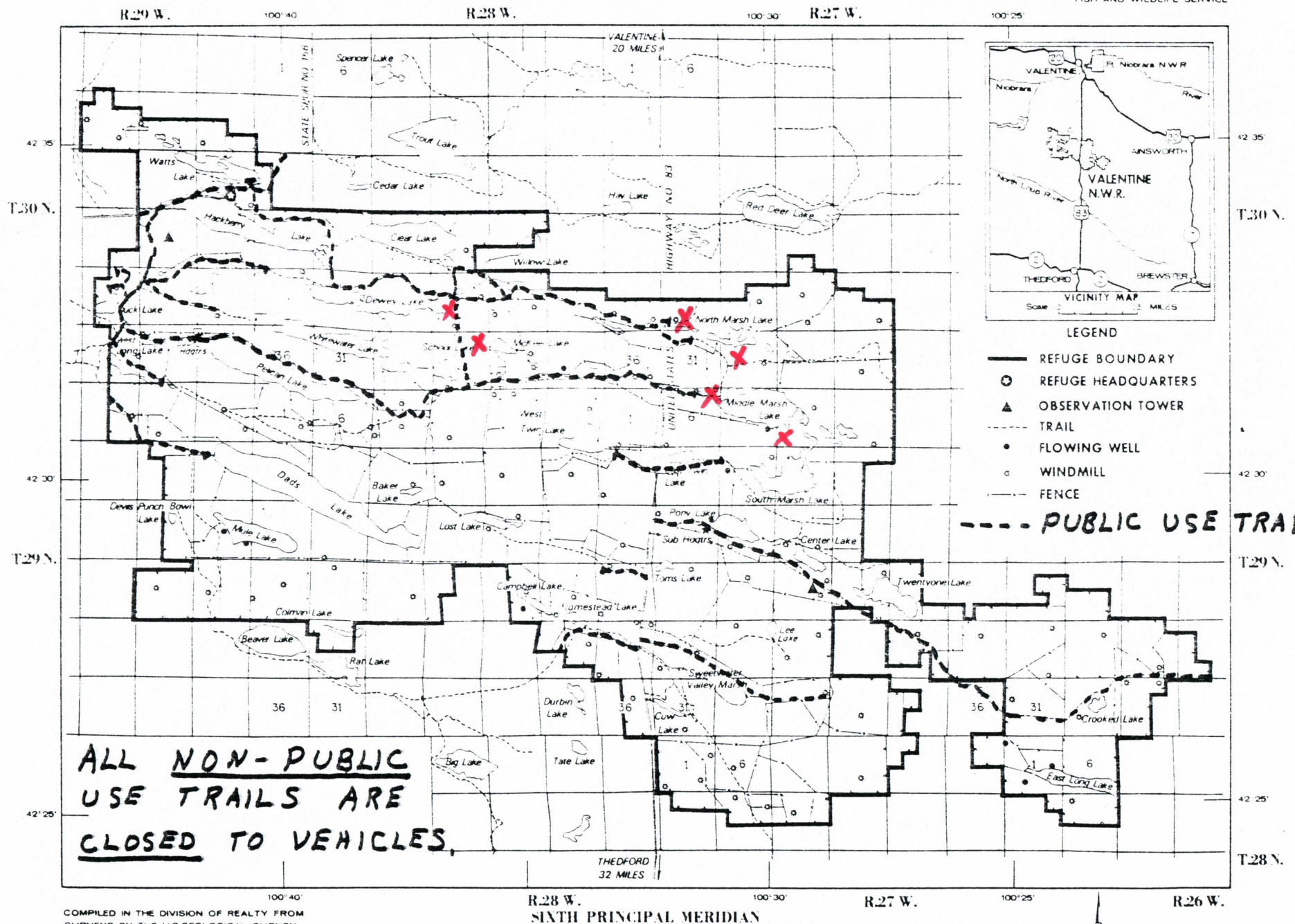
cc: Wayne King (RO-RW)

VALENTINE NATIONAL WILDLIFE REFUGE

CHERRY COUNTY, NEBRASKA

UNITED STATES
DEPARTMENT OF THE INTERIOR

UNITED STATES
FISH AND WILDLIFE SERVICE



**X - AMERICAN BURROWING BEETLE
PASTURE SITES - 1992**