

United States Department of the Interior FISH AND WILDLIFE SERVICE

IN REPLY REFER TO:

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Assistant Regional Director (FWE)

Fish Springs Pond Snail

MEMORANDUM

To:

From:

Subject: Fish Springs Pond Snail.

This is in response to your memorandums concerning the status report on the Fish Springs Pond Snail that were sent to: 1) Director, FWS (OES), undated; and 2) District Manager, Bureau of Land Management, Salt Lake City, Utah, dated January 23, 1987. Neither of these memorandums was reviewed by Refuges and Wildlife, nor was a copy provided to us for information. The Refuges and Wildlife Regional Office staff was advised of the reported extinction by the Regional Director during the Project Leaders' meeting held during March. Naturally, it was upsetting to learn that a species had become extinct on a National Wildlife Refuge because of our management.

Since the Project Leaders' meeting, the report prepared by Dwight Taylor under contract dated November 24, 1986, has been reviewed. Other documents relating to the Fish Springs Pond Snail have also been reviewed.

Mr. Taylor expressed the opinion that the demise of the snail was caused entirely through the management and development of the Fish Springs Refuge. Refuges and Wildlife takes exception to that, especially since it is implied that the actions carried out since Russell's 1970 study represented the final actions that are responsible. Therefore, it is important that additional information be brought forward for consideration.

Fish Springs National Wildlife Refuge was established in 1959 for the purpose of providing waterfowl nesting and resting habitat in the Pacific Flyway. Five major springs and several lesser ones flow from the eastern edge of the base of the Fish Springs Range. By 1964 the development of nine shallow impoundments was completed which resulted in 2,000 acres of saline marsh habitat. Water was diverted from these springs into the newly constructed marshes. Some ditches were developed to direct water into impoundments and some springs have been cleaned to maintain flows. However, this is not the first development of the springs. Nor, did this action destroy the habitat.

The road adjacent to the Refuge was known as the Lincoln Highway and was the Pony Express Route across the Utah desert. Hemphill collected the snails in 1868 some 7 years after the Pony Express service was discontinued. This was the last time anyone collected live specimens. What impact the Pony Express had on the springs is unknown. In the 1950's, a major portion of the Middle Springs area of the present Refuge was highly developed for frog production. It is likely that this had significant impact on the area too, as the operation was conducted from the early 1950's to approximately 1970. While the Refuge was established in 1959, the frog farm continued operating as a condition of the land acquisition program for another 10-12 years.

Richard Russell searched for snail shells at Fish Springs in June 1970. Some 134 complete shells and 30 fragments were located. None of these were living, but he suggested that some were fresh. All collected material was found near Crater Springs in an area that had been burned. It is suspected that snail shells may not have been found at all had the area not been burned to open up the extremely dense vegetation. Refuge records indicate that this area has not been burned since 1970.

No one had expressed a concern for the snail nor do records indicate knowledge of the Fish Springs Pond Snail until 1970 when Russell made his study. After that, Refuge staff made attempts to find snails, but none were ever located. Marsh management continued and it appeared that there was adequate habitat in the springs area to support a population if it did exist. No guidance has ever been provided by Area or Regional Office Endangered Species staff concerning snails or their management!!

In 1976, Dr. David Bickel, from Minot State College, North Dakota, contacted the Refuge concerning the Fish Springs Pond Snail. He was working under contract with the Office of Endangered Species in Washington. The Refuge Manager collected snail material and submitted this to Bickel, but the snails were not the correct species according to Bickel's report dated January 3, 1977. Bickel visited Fish Springs in September 1976 and spend 4 hours searching for snails. None were found. His report recommended that an extensive study be made of the area to determine the species' status. Unfortunately, Mr. Taylor failed to list the Bickel report in the Literature Cited portion of his own report.

The Fish Springs Refuge Manager asked for information and guidance on the Pond Snail in a memorandum to the Regional Office on November 21, 1983. While I am sure that discussions followed, there are no written records showing that direction was provided.

It wasn't until the May 22, 1984, Federal Register that the U.S. Fish and Wildlife Service (Service) listed the species as a candidate for threatened or endangered status. It appears that the Service in general did not respond in a timely manner to Fish Springs Pond Snail issue.

All of this is not to point fingers, but merely to illustrate that there is much more to the issue. While the development activity on the Refuge may have contributed to the demise of the Fish Springs Pond Snail, it is obvious that the Refuge was not wholly responsible. Please note:

- 1. The last living specimen collected was in 1868.
- 2. The age of "fresh" specimens from Russell's 1970 collection may not have been all that recent.
- 3. Development work of the frog farm may have impacted the area due to flooding, as well as water diversion. Records indicated that before establishment of the Refuge, spring development was carried out at Middle, Thomas, South, House, and North Springs for muskrat management by private individuals.
- 4. Taylor stated that the shallow, semi-permanent marshes around the springs had been entirely eliminated. This is an incorrect statement.
- 5. Taylor did not search the same area as Russell.
- 6. There may also be other factors as yet unidentified that may also have contributed to the loss of the species.
- 7. Based on Bickel's study, the snail was absent 10 years before Taylor visited the area.

Some exceptions are also taken to the Listing Coordinator's memorandum dated March 16, 1987. He indicated that "considerable information" had been passed to Fish Springs since 1977 concerning the Pond Snail. If so, there is no record of that information at the Refuge, in the Salt Lake City Endangered Species Office, or the Regional Office. The Fish Springs Refuge Managers have been expressing concerns since at least 1970-71 when Russell made his study. The memorandum concludes by stating that the Refuge continued to burn sites when they knew that the species might be in danger. According to the Refuge Manager, the area Russell found the shell in has not been burned since 1970. It is suggested that the Coordinator do a better job reviewing the total situation before making judgments.

In the future, we request closer coordination with Refuges and Wildlife staff on all issues that impact refuges and their management. If there are concerns of endangered/threatened or candidate species, please get us involved early in the program. None of us would ever want to be party to the extinction of a species, and it is important that we work together to prevent such happenings.