TWO MAJOR COLLECTIONS DONATED TO THE STATE FOSSIL and STATE ROCK, MINERAL, AND GEMSTONE COLLECTIONS

by John Hoganson

This year two collections of fossils, rocks, minerals, gemstones, and lapidary pieces have been donated to the Survey to be curated into the State Fossil and State Rock, Mineral, and Gemstone Collections housed at the State Museum--Heritage Center. Specimens from these collections, the Melvin "Mel" Anderson Collection and Blossomae Campbell Collection, will be exhibited at the Heritage Center soon.

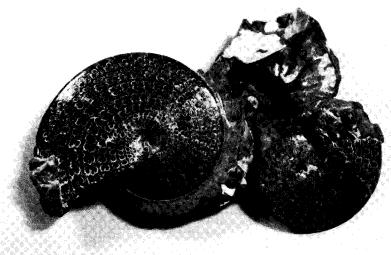


Blossomae Campbell at her and Earle's rock, mineral, and fossil "museum" at their home in Bismarck. *Photo by Mike McCleary*, *Bismarck Tribune*.

Ammonites (Sphenodiscus lenticularis) from the Fox Hills Formation (Blossomae Campbell Collection).

The Blossomae Campbell Collection

The Blossomae Campbell Collection consists of more than 3,500 cataloged specimens of minerals, rocks, and fossils collected over the past 20 years. Blossomae's main interest was in minerals and the collection contains specimens from around the world. Her favorite mineral was calcite and her exhibits of this and other minerals brought many awards at gem and mineral shows around the country. Other specimens in her collection include several fluorescent minerals, many different types of quartz, many unusual rock and mineral types from North Dakota, and a piece of black marble from North Dakota's first capital building that burned many years ago. Blossomae was also fond of ammonites (fossil shells of marine animals related to the living Nautilus) and had several dozen exquisite specimens in her collection, primarily from the Fox Hills Formation. specimens of North Dakota's state fossil, Teredo-bored petrified wood, are also in the collection. Many of the fossils from Blossomae's collection will be included in the "Corridor of Time" exhibit currently being planned at the Heritage Center.



Minerals and rocks from the Blossomae Campbell Collection were donated to the Survey by her husband Earle, the fossils by her grandson Johnathan Campbell. Her passing, on October 3, 1993, saddened us all who knew Blossomae as a vibrant, friendly, and knowledgeable person. Earle and Johnathan believe that Blossomae would have wanted her collection to remain intact and decided to donate it to the Survey for safe keeping and display.

Blossomae was born in Buhler, Kansas, on April, 29, 1920. Earl and Blossomae lived in Tennessee after their marriage on December 31, 1942 where Earl was stationed in the Navy. In 1960 they moved to Moorhead, Minnesota where Blossomae was administrative assistant to the athletic director at Concordia College. They moved to Bismarck in 1969. Blossomae worked for the Workers Compensation Department and Health and Human Services Department until her retirement in 1986.

Blossomae was an active promoter of rock, mineral, and fossil clubs in the Bismarck-Mandan area. She was a member of the North Dakota Paleontological Society and Central Dakota Gem and Mineral Society and was scholarship chairperson for the Rocky Mountain Federation of Mineralogical Societies. Blossomae was also editor of the informative and award-winning bulletin of the North Dakota Paleontological Society, *Paleodiscovery*.

The Blossomae Campbell Collection has been on display in the basement of Earle and Blossomae's house in Bismarck for many years. Over the years, the Campbell's hosted countless tours of the collection for school children, university classes and other interested groups. I

am sure that exhibits of this collection will draw considerable interest at the Heritage Center. Thanks Blossomae, Earle, and Johnathan for sharing this extraordinary collection with the citizens of the state.

The Melvin "Mel" Anderson Collection

The Mel Anderson Collection consists of several hundred specimens of rocks, minerals, fossils, and lapidary pieces. Many of the rock and fossil specimens, including some rare, large, Paleocene conifer cones, were collected by Mel from sites in North Dakota. A complete Eocene fish fossil is part of the collection. Mel's primary interest, however, has been in lapidary, particularly making cabochons ("cabs" are precious stones cut in convex shapes, polished but not faceted, that are often made into jewelry) from rocks and minerals from around



Mel Anderson working on a rib of the Highgate Mastodon at the Survey's paleontology laboratory at the Heritage Center.

Part of the cabochon collection made by Mel Anderson and donated to the State Rock, Mineral, and Gemstone Collection. the world. The collection includes hundreds of beautiful pieces made by Mel. Mel has won many awards at local and national gem and mineral shows for his lapidary art work.

Mel is from Arnegard, North Dakota. He and his wife Viola have lived in Bismarck since 1958. It was in 1958 that Mel starting working for the Federal Highway Administration. He retired from the Highway Administration in 1974. It was after his retirement that Mel became interested in lapidary and "rockhounding" and began operating Andy's Gem Shop out of his home. Mel has been an active member of the Central Dakota Gem and Mineral Society since 1976 and was state representative to the Rocky Mountain Federation of Mineralogical Societies for several years. He also served

as Treasurer for the Central Dakota Gem and Mineral Society and Rocky Mountain Federation of Mineralogical Societies.

In 1985, Mel became a volunteer at the North Dakota Heritage Center and has contributed hundreds of hours of his time to various projects. Mel was one of our first volunteers in the Survey's paleontology laboratory at the Heritage Center and spent many hours on the restoration of the Highgate Mastodon. He worked with us until he had to resign because of health reasons. Thanks Mel for your help with the mastodon restoration and the donation of your outstanding collection to the Survey. Both will be enjoyed for a long time by visitors of the museum.

NDGS GEOLOGISTS ATTEND FIELD CONFERENCE

Last summer, NDGS geologists Randy Burke and Paul Diehl wrote about the Conoco Inc., Dickinson State #74 Lodgepole discovery well and the idea that production there could be coming from a type of reef structure known as a Waulsortian mound. The article, "Waulsortian Mounds and Conoco's New Lodgepole Well," stirred widespread interest in the oil industry, as evidenced by the fact that we had well over one hundred requests for additional copies of the *NDGS Newsletter* in which it appeared. That issue is now out of stock, but photocopies are available.



The article also lead to invited talks by Randy Burke about the Conoco well and the characteristics of Waulsortian mounds. One of the talks coincided with the annual Montana Geological Society field conference, which both Randy and Paul attended. A major part of that conference dealt with the Tyler Formation, an important petroleum producing sequence of rocks in western North Dakota. After the conference, Randy and Paul spent a day examining Waulsortian mound outcrops in Swimming Woman Canyon. Studying these exposures in the field offered an invaluable opportunity to observe

features that cannot be seen in well cores and that will be useful in their petroleum resource studies.

Randy also took annual and unpaid leave to prepare and present a paper at an international colloquium and forum on Global Aspects of Reefs. The paper he presented was about structural controls of modern reef development, a characteristic important to predicting the location of Waulsortian mounds.

NDGS geologists Paul Diehl (center) and Randy Burke (right) at outcrops considered to be the Tyler Fm. type section, Fergus County, Montana.