

## NORTH DAKOTA STATE CLIMATOLOGIST PROGRAM HISTORY

### And A Little Bit More

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**Brief Federal Background:** The U.S. National Weather Program was started within the U.S. Signal Corps in 1870. It was transferred to the U.S. Department of Agriculture (USDA) in 1890 where its name was changed to the Weather Bureau. One of its charges was to measure and report on the climate of our nation. To fulfill this mission the Cooperative Weather Network (Co-op) was authorized within the USDA Weather Bureau in 1893. The Section Director or later, the Meteorologist in Charge (MIC) of each state's lead Weather Bureau Office was responsible for their Co-op Network and climatic data. A more detailed explanation of federal events is available in the accompanying document entitled; An Historical Look At Climatology In the U.S.

B. H. Bronson, Section Director of the Bismarck Weather Bureau Office was in charge of North Dakota Climatology from 1897 – 1905. He was followed by Section Directors, Orris W. Roberts who served from 1906 – July, 1939 and Frank J. Bavendick (August, 1939 – August, 1954). During this time Bavendick in cooperation with the ND State Water Commission authored two booklets (1946 and 1952) describing North Dakota's climate and weather.

**National State Climatologist Program Begins:** With the formation of the National State Climatologist Program in August, 1954, Frank J. Bavendick also became the first designated North Dakota State Climatologist (SC) serving from August, 1954 - October, 1959 in Bismarck.

**A Muddy Period in ND State Climatologist History:** Unfortunately from late 1959 thru 1975 records of who served as the State Climatologist, and why the SC position moved to Fargo were minimal. An anonymous person, apparently around the mid-70s, visited with several former NWS and North Dakota State University (NDSU) employees to determine the SC's and their length of service. They included; Vern Hendrikson, long-time MIC at the Fargo NWS station; Carl Sanderson and Keith Blessom, former North Dakota SC's during this period; and Dr. Enoch B. Norum, Chair, Department of Soil Science, NDSU. This anonymous person left some working papers and a partial manuscript, from which I gleaned most of the information for this period.

After Frank Bavendick left the SC position in October, 1959, it was filled by Stanford R. Miller until March, 1961. The office was vacant from March until August, 1961 when Alfred A. Skrede took over, serving until October, 1964. He was followed by Acting SC, Carl J. Sanderson from November, 1964 – January, 1965, and then Mr. Herman Stommel took over as SC until August, 1967.

**State Climatologist Moves to Fargo:** Prior to 1967, Dr. Enoch B. Norum initiated discussions with the NWS on moving the North Dakota State Climatologist Office to NDSU in Fargo. Dr. Norum was convinced that collocating the State Climatologist with the NDSU Agricultural Experiment Station would greatly improve the productivity of both. NDSU's research and service to the state's agricultural industry would benefit from more timely and knowledgeable use of climatic data. The State Climatologist would better understand what types of climatic data and information were most important to agriculture, and would have access to NDSU's excellent mainframe computer facilities for data analyses. Dr. Norum's argument prevailed and the SC's Office was moved from Bismarck to the Department of Soil Science, NDSU in August, 1967. Coincidentally this was about the same time NWS administrators may have been filling SC positions with in-house personnel because funds for qualified SC's were limited.

**First Fargo Based SC:** The first State Climatologist located at NDSU was Keith Blessom, the Fargo NWS Co-op Network Program Manager, who also served as SC from August – November, 1967. He was followed by Arlon Sneider from November, 1967 - November, 1968. Ray Jensen was the State Climatologist from November, 1968 – June, 1972. During this time Jensen was also a Ph.D. graduate student in the Department of Soil Science, working on measuring and evaluating the effect of seasonal water deficits on barley. He completed his research and received his degree in May, 1971. Jensen, with funding help from the State Water Commission, authored a comprehensive bulletin entitled “Climate of North Dakota” shortly before he left the position in June, 1972. Following Jensen, Keith Blessom again assumed the SC duties from June until August, 1972. He was followed by someone named Bailey who served from August, 1972 until February, 1973, but there is no other information about him. Keith Blessom was again named SC from February until April, 1973.

**National State Climatologist Program Terminated:** The National State Climatologist Program was terminated by the NWS in April, 1973. After termination the responsibilities and duties related to the SC and the Co-op Network were assigned to the local Fargo NWS Forecast Office with no increase in personnel. However in most states local Land Grant University personnel volunteered to take over some of the State Climatologist functions.

**NDSU Agricultural Meteorologist Volunteers to Assume Some SC Responsibilities:** Dr. Juanito M. Ramirez, an Agricultural Meteorologist in the Department of Soil Science, NDSU volunteered to assume some of the North Dakota SC responsibilities, and was recognized as such by the NOAA Environmental Data Service (EDS). Dr. Ramirez had earlier published ND Extension Bulletins on temperature and precipitation and was familiar with climatology outreach in the state. Through a 1974 arrangement with the NWS, the former North Dakota State Climatologist's records and data files were given to the Department of Soil Science. National Weather Service personnel continued to maintain the cooperative stations at this time. Dr. Ramirez served as the North Dakota SC beginning in April, 1973 until he left the university in April, 1977.

Dr. John W. Enz, an agricultural climatologist was hired by the NDSU Soil Science Department in November, 1977 to replace Ramirez, and was assigned a few of the State Climatologist responsibilities. The SC appointment was formalized by the newly named NOAA National Climatic Center (NCC), formerly the EDS, in January, 1978. Since Enz had no Extension Service appointment a new Applied Climatology and Service project was initiated January 1, 1979 to legitimize the State Climatologist's new climatic data and information advisory service and the maintenance of the ND climatic data base in the Department of Soil Science.

**North Dakota Agricultural Weather Network (NDAWN) Begins:** Enz started the North Dakota Agricultural Weather Network (NDAWN) with six automated stations in 1989 to provide accurate, timely, and reliable weather data and crop management information for North Dakotans. Today it consists of 70 stations distributed throughout the state and in border regions of surrounding states (<http://ndawn.ndsu.nodak.edu>). Enz served as State Climatologist from January, 1978 until his retirement in September, 2006. He remained active as SC until his replacement arrived in January, 2007.

**New State Climatologist:** Dr. F. Adnan Akyüz was hired in January, 2007 by the NDSU Dept. of Soil Science to replace Enz as NDSU Climatologist, ND State Climatologist, and NDAWN Director.

## North Dakota State Climatologists at a Glance

<u>Name</u>	<u>Time of Service</u>	<u>Position</u>
B. H. Bronson	1897 - 1905	NWS Section Director, Bismarck
Orris W. Roberts	1906 - Jul 1939	NWS Section Director, Bismarck
Frank J. Bavendick	Aug 1939 – Aug 1954	NWS Section Director, Bismarck
Frank J. Bavendick	Sep 1954 - Oct 1959	State Climatologist, Bismarck
Stanford R. Miller	Oct 1959 - Mar 1961	State Climatologist, Bismarck
Alfred A. Skrede	Aug 1961- Oct 1964	State Climatologist, Bismarck
Carl J. Sanderson	Nov 1964 - Jan 1965	Acting SC, Bismarck
Herman Stommel	Jan 1965 – Aug 1967	State Climatologist, Bismarck
State Climatologist Office moved from the NWS Office, Bismarck ND to North Dakota State University in Fargo ND in August, 1967.		
Keith Blessom	Aug 1967 - Nov 1967	NWS Coop Program Manager, Fargo State Climatologist, Fargo
Arlon Sneider	Nov 1967 - Nov 1968	NWS State Climatologist, Fargo
Ray Jensen	Nov 1968 – Jun 1972	NWS State Climatologist, Fargo
Keith Blessom	Jun 1972 – Aug 1973	NWS Coop Program Manager, Fargo State Climatologist, Fargo
Bailey	Aug 1972 – Feb 1973	No other information
Keith Blessom	Feb – Apr 1973	NWS Coop Program Manager, Fargo State Climatologist, Fargo
The National State Climatologist Program was terminated in April 1973. Dept. of Soil Science Faculty, NDSU have subsequently volunteered or been assigned some of the SC duties.		
Juanito M. Ramirez	Apr 1973 - Apr 1977	Ag. Meteorologist, NDSU & SC
John W. Enz	Jan 1978 - Sep 2006	Ag. Climatologist, NDSU & SC
F. Adnan Akyüz	Jan 2007 - Current	Climatologist, NDSU & SC