Governor Proclaims November as Tennessee Volunteer Weather Observer Month

By Ralph Troutman, Observing Program Leader, NWS Nashville, TN

More than 900 volunteer weather observers in Tennessee were honored during November for dedicated service to their fellow citizens, the state and NOAA's National Weather Service.

Tennessee Governor Phil Bredesen officially proclaimed November as Tennessee Volunteer Weather Observer Month. The proclamation recognizes the historic NWS Cooperative Observer Network and the rapidly expanding Community Collaborative, Rain, Hail and Snow Network, commonly known as CoCoRaHS.

Currently, Tennessee has 193 Cooperative Observer stations that provide NWS forecast offices with daily reports on temperature, precipitation and other weather factors such as snow depth, river levels and soil temperature. The Tennessee Cooperative Observer Network dates back to the 1850s and is part of a national network that includes more than 11,700 observers.

The state’s CoCoRaHS program boasts 745 observers. They are part of a unique, non-profit, community-based, network of volunteers working to measure and map precipitation. This popular program originated with the Colorado Climate Center at the University of Colorado in 1998 and has since expanded to include approximately 12,000 volunteers in 23 states.

In his proclamation, (Page 2) Governor Bredesen attributes the network’s rapid growth to heightened weather awareness.

He notes, “Increased understanding of natural disasters, paired with the ability to hear and see such events through various media, has resulted in an unprecedented interest in weather across the Volunteer State.”

Weather records retain their importance as time goes by. Long and continuous records provide an accurate picture of a locale’s normal weather and give climatologists and other experts a basis for predicting future trends. These data are invaluable for scientists studying floods, droughts and heat and cold waves. Each month, Cooperative Observers mail their records to the National Climatic Data Center for publication in Climatological Data or Hourly Precipitation Data.

NOAA is dedicated to enhancing economic security and national safety through the prediction and research of weather and climate-related events, through information service delivery for transportation, and by providing environmental stewardship of our nation’s coastal and marine resources. Through the emerging Global Earth Observation System of Systems, NOAA is working with its Federal partners, more than 70 countries and the European Commission to develop a global monitoring network as integrated as the planet it observes, predicts and protects.

“Increased understanding of natural disasters, paired with the ability to hear and see such events through various media, has resulted in an unprecedented interest in weather across the Volunteer State.”
WHEREAS, monitoring the climate and weather of Tennessee is becoming increasingly important to the economic health of the state; and

WHEREAS, the high impact weather events of 2007 emphasize the importance of weather records across the state; and

WHEREAS, increased understanding of natural disasters, paired with the ability to hear and see such events through various media, has resulted in an unprecedented interest in weather across the Volunteer State; and

WHEREAS, the Cooperative Weather Observing Network in Tennessee dates from 1854 and these Citizen Scientists continue to provide critical information on a daily basis across the entire state; and

WHEREAS, the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS), volunteers across Tennessee, report precipitation and hazardous conditions in support of the mission of the National Weather Service;

NOW, THEREFORE, in recognition of the effort these Volunteer Weather Observers dedicate to monitoring weather and climate across Tennessee; I, Phil Bredesen, Governor of the State of Tennessee, do hereby proclaim the month of November, 2007, to be

TENNESSEE VOLUNTEER WEATHER OBSERVER MONTH

and urge all Tennesseans to join in the effort to live safely with the natural forces that surround us this year.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the official seal of the State of Tennessee to be affixed at Nashville on this 14th day of September, 2007.

[Signature]
Governor

[Signature]
Secretary of State
The following three articles were compiled by Melody Magnus, editor, from the Internet. You decide the truth of this weather lore.

The first viewpoint comes from the Florida Gardener. The old saying, "Red sky at night, sailors' delight; red sky in the morning, sailors take warning" does have merit. Cumulus (Latin for heap) clouds increase and ride lower in the sky toward evening. [www.floridagardener.com/misc/weather.htm](http://www.floridagardener.com/misc/weather.htm)

The second viewpoint comes from Hong Kong Observatory Reporter Judith Young. Sometimes the sky appears very colorful around sunrise and sunset. At these times, the sun shines from a low angle. Sun rays have to go through a thick atmosphere, resulting in scattering by water vapor, water droplets, dust particles, etc., in the air. Light with a shorter wavelength, such as cyan, blue or purple, is scattered away, leaving red, orange and yellow shades, turning the sky reddish.

In mid-latitude regions, storms and rains usually move from west to east. A reddish sky around sunrise means a lot of water vapor already is present in the atmosphere. As clouds come in from the west, rainy weather becomes more likely. A reddish sky near dusk means that weather has improved in the upstream area to the west. Sunlight scattered by the atmosphere is reflected by clouds, making the sky red.

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Sunlight scattered by the atmosphere is reflected by clouds, making the sky red. As the clouds overhead move eastward, the weather is expected to improve. That explains: "Red sky at night, sailors delight."

The relationship between red sky and weather is complicated in real life. One example is that near dusk, the sky can become reddish temporarily after rain. Besides, especially in low latitude areas such as Hong Kong, weather systems sometimes move from east to west, e.g., typhoons, not west to east. Therefore, sky color is not always a good predictor of weather changes. To make an accurate weather forecast, it is necessary to take account of other weather factors and carry out a full analysis.

www.hko.gov.hk/education/edu01met/wxphe/ele_redskye.htm

The third viewpoint is from Joe Sienkiewicz, Chief of NOAA’s Ocean Applications Branch and a Science and Operations Officer with the U.S. Ocean Prediction Center.

Indeed, there is scientific validity to the adage, "Red sky at night, sailors delight; red sky in the morning, sailors take warning." This saying has very old roots. In the New Testament (Matthew 16:2-3), the following quote is attributed to Jesus: "When it is evening, ye say, fair weather: for the heaven is red. And in the morning, foul weather today, for the heaven is red and lowering."

There are also versions of this saying that refer to shepherds instead of sailors. Two factors contribute to the cogency of this saying. The first is that weather systems generally travel from west to east in the mid latitudes. Because the sun rises in the east and sets in the west, a rising sun in advance of an approaching weather system would illuminate the approaching mid- and high-level clouds to create a red sky in the morning.

Alternatively, if the sun is setting as a weather system exits and high pressure is building, then the departing clouds would be illuminated. This would create a red sky at night with fair weather to follow.

The reddish color results from scattering of sunlight by suspended particles and aerosols in the atmosphere.

The sun’s rays pass through a greater length of atmosphere at sunrise and sunset than at any other time of day. In addition, aerosol, dirt and dust concentrations are maximized in the lowest layers of the atmosphere when the atmosphere is dominated by sinking air—high pressure. Therefore, when there is high pressure in the area, you see vivid red sunsets and sunrises.

So this saying is valid in mid latitudes if the timing of a weather system is just right. That is, clearing in the east at sunrise with approaching clouds and clearing before sunset in the west as clouds exit to the east. If weather systems and their associated clouds are moving from south to north, as can occasionally occur, the saying does not hold.

George W. Bomar, right, observer at Dripping Springs, TX, received the John Campanius Holm Award for his outstanding service to his state and country. The award was presented by Joe Arellano, Jr., Meteorologist in Charge (MIC), NWS San Antonio, TX.

Melba Bruce has been the official Observer in Minneapolis, KS, for the past 23 years. In addition to recording maximum and minimum temperatures and precipitation data, Melba is also the observer for the Solomon River at Minneapolis. She is often called to take river level readings. John Woynick, NWS Hydrology Program Manager (HPM), stated that the award is a reflection of Melba's extensive knowledge of the Solomon River in Minneapolis. On occasion, she has even provided the NWS precipitation and weather data in the middle of the night. Her dedication to service and the high quality of her reports are much appreciated by NWS staff.

The Holm Award was presented to Melba Bruce at the Minneapolis, KS, City Council meeting by Bill Newman, Data Acquisition Program Manager (DAPM), at NWS Topeka, KS. Photo by Topeka MIC Ken Harding.
John Campanius Holm Award Winners

David Caldwell was presented the Holm award for his 41 years of outstanding service at the Red River Research Station Coop site. David and his wife accepted the award during the annual field day at the Red River Research Center in Bossier City, LA.

Bill and Shirley Driscoll have recorded quality data for the Coop Program for more than 31 years. The Driscolls established the Rossville weather observation station in 1976. They have provided nearly 11,500 reports over the years, paying particular attention to water levels in Cross Creek as it flows through Rossville. Bill and Shirley retired from their post at the end of June 2007 but continue to provide supplemental observations.

“The Driscolls have exemplified the spirit of John Campanius Holm for many years,” said NWS HPM John Woynick. “They have been an excellent observing team and have employed their knowledge of Cross Creek to provide invaluable information that has saved lives and property in Rossville.” Kansas State Climatologist Mary Knapp noted that data provided by the couple “has been invaluable in a number of research projects over the past few years.”
The John Campanius Holm Award was presented to **Elizabeth Foley** of McColl, SC, by Michael Caropolo, MIC, Wilmington, NC. McColl Mayor Gary Quick and members of the City Council presented Elizabeth with a city award in appreciation for her 35 years of collecting climate information for the community.

Elizabeth was the McColl City Clerk and Treasurer for 37 years. In 1984, she saw a tornado rip through McColl, killing six people and damaging or destroying 59 homes, including her own and her mother’s homes. She worked closely with FEMA and other agencies to help the town recover from this disaster.

From left are MIC Michael Caropolo, Holm Recipient Elizabeth Foley, and OPL Gene Funderburk. Photo by WCM Thomas Matheson.

The Honorable **Eugene S. Gates, Jr.**, received the John Campanius Holm Award from NWS Western Region and Reno, NV, staff during a presentation and luncheon in his honor. Judge Gates has been the Cooperative Observer in Mina, NV, for more than 33 years.

Pictured from left are Susan A. Nelson, NWS Western Region (WR) Data and Observing Systems Program Manager; Rudy Cruz, NWS Reno OPL; David Brandon, WR Division Chief, Hydrology and Climate Services; The Honorable Eugene “Gene” S. Gates, Jr.; and Jane Hollingsworth, NWS Reno MIC.
Everett keeps impeccable records as an observer in the Historical Climate Network. Additionally, he has often called the NWS Sioux Falls office to report rapidly changing weather. His extra efforts have resulted in changes to forecasts and occasionally the issuance of an advisory or warning. We know we can always count on Everett for his support, and we greatly value our partnership.

Randy Wagner, right, of Max, ND, received the Holm award for 21 years of stellar service as a Cooperative Observer. The award was presented by Bismarck MIC James Meyer and CPM Sandra Wiche. Randy, the assistant manager, began reporting the weather from the Max Grain Elevator in 1986. He provides temperature, precipitation and snow data. Randy is also a trained severe weather spotter and is responsible for sounding the emergency sirens to alert Max residents of approaching tornadoes. Although Randy now lives in Minot, he makes the 25 mile commute every day—regardless of weather conditions—to report data.

Randy also serves as Assistant Chief of the Max volunteer fire fighting force. He gladly shares weather information with area farmers and newspapers. His forms are always among the first ones we receive every month. Randy is a much admired and dedicated Cooperative Weather Observer.
The Special Service Award is granted to express appreciation for special services rendered by an individual or organization. It may be prepared and approved by a NWS local supervisor, a union representative, a hydrologist, a community preparedness staff member or other official. It may be awarded for any significant service believed appropriate by an official of the supervising office, including:

- Timely and unusual action to ensure receipt of weather records reports
- Unusual assistance or ingenuity in maintaining equipment and observations in times of emergency
- Consistent or unusual service rendered a local office where other awards do not apply
- As an intermediate award when significant services are rendered to warrant recognition, but the requirements of other awards, such as the Jefferson or Holm Awards, have not been met.

United States Department of Commerce
National Oceanic and Atmospheric Administration

SPECIAL SERVICE AWARD

Presented to

in recognition and appreciation of
Significant Services rendered
for the National Weather Service
NWS Bismarck, ND, held an Open House in conjunction with NOAA's 200th celebration. At the event, Lois Lubiens of Fullerton, ND, accepted a Special Service Award for 50 years of observations by the Lubiens family. The award was presented by Bismarck MIC James Meyer and CPM Sandra Wiche.

The Lubiens family legacy began when Lois' father-in-law, W. E. Lubiens, agreed to take observations in October 1957. The tradition was passed on to Lois' husband, Loren, and their son, Glenn. Finally, Lois took over in 1992 and has been completely dedicated to the job. In 2003, Lois received the John Campanius Holm Award. Glenn has taken the family's interest in weather a step further by pursuing a degree in meteorology at the University of Utah.

Joe Armstrong of Springfield, IL, was presented with a Special Service Award by NWS Central Illinois Hydrometeorological Technician (HMT) John Parr, and DAPM Billy Ousley.

Besides serving as a Coop Observer, Joe also takes the snowfall readings for the Springfield, IL, Local Climatological Data report. Joe was an invaluable source of information for NWS forecasters during a blizzard in February 2007. The presentation was made during an Open House at the NWS. Photo by Dan Kelly, Meteorological Intern (MIT).
**Special Service Award**

**Glen Oest**, who recently retired as observer of the Havana, IL, Coop station, was presented with a Special Service Award for more than 25 years of dedicated service. Billy Ousley, DAPM of the Central Illinois NWS office, made the presentation. Photo by Dan Kelly, MIT.

**Special Act Award**

Consumers Energy employee **David VanLoon**, right, of Coop site **Wellston Tippy Dam**, is shown receiving a Special Act Award for his 22 years recording Cooperative Observations. The award was presented at his retirement luncheon. Presenting the award was Scott Rozanski, NWS Gaylord, MI. Photo by CPM Dennis R. Fruehauf.
100 Year Honored Institution Award

Employees from the Brookfield Power Trenton Falls Hydroelectric Station accept a 100 Year Length of Service Award.

Pictured from left are Peter Arthur, Jim Helmer, and Martin Lachut. The award was presented by Mitch Gilt, HMT, NWS Binghamton, NY.

75 Year Honored Institution Award

Members of Brewerton Lock 23 of the New York State Canal Corporation accept the Honored Institution 75 Year Length of Service Award.

Pictured from left are Bobby Hudgins, DAPM, NWS Binghamton, NY; Pete Case, Lockmaster, and staff members Keith Rappleye and Bill Sivers.
Mary Harker, of Heron, MT, was honored by NWS Missoula, MT, staff with the presentation of the Benjamin Franklin Award for 55 years of dedicated service. In attendance at the ceremony were three of Mary’s six children and two of her grandchildren. The presentation was conducted at the Whitepine Community Church where Mary is the pastor.

The station at Heron began in 1912 and has had only a brief break in its 95 year record. The break occurred around 1940 but was quickly resolved. Mary took over observing responsibilities in 1952. Since then, the station has been stable under Mary’s expert care for more than a half a century. Throughout her career, Mary has maintained the highest standards. Mary was a recipient of the John Campanius Holm Award in 1970 and the Thomas Jefferson Award in 1978.

James Becker
of Williamsville, MO, proudly accepts the prestigious Edward H. Stoll Award for 50 years of volunteer service in the Cooperative Weather Program.
Presenting the award is Beverly Poole, MIC, NWS Paducah, KY. Photo by NWS OPL Mike Nadolski.
The Edward H. Stoll Award was established in honor of Edward Stoll, who served as a Cooperative Observer without a single day of interruption for 76 years. This award is granted to an Observer after 50 years of service.
**Jimmie Harris** was presented the Edward H. Stoll Award during a luncheon ceremony at the Cedar Island, NC, Community Center. A host of family members and friends from the community came out to enjoy the celebration affectionately named “Jimmie’s Party.”

Jimmie’s brother, Ray Harris, started taking observations at Cedar Island in 1956. He took observations until his illness and subsequent death in December 2004. Ray dedicated 48 years of daily volunteer service to the community of Cedar Island and the nation.

Knowing how important it was to Ray, throughout the difficult days of Ray’s illness, Jimmie took over taking observations without missing a single day. Today Jimmie continues to provide an admirable service to the community through the Cooperative Program.

Once again it was time for a reunion of family and friends as **Herman Korthals**, Coop Observer at Platte, SD, accepted the Edward H. Stoll Award commemorating Herman’s 50 years of dedication to our program. A big crowd was on hand to congratulate Herman and celebrate with cake and conversation. Presenting the award was NWS Sioux Falls MIC Greg Harmon and DAPM Donald Morin. The award was presented in the offices of Herman’s family owned newspaper, *The Platte Enterprise*.

Pictured from left are **Herman Korthals** and NWS Sioux Falls, SD, MIC Greg Harmon. Photo by DAPM Donald Morin.
The staff at the **University of Nebraska’s Lincoln Haskell Agricultural Laboratory** was presented with a 50 Year Honored Institution Award for their service near Concord, NE. For the past 40 of those years, Bob Frerichs has been the principal observer. Some 20 people were on hand, including Pat Bathke, who assists Bob with the observing program. Lab Director John Witkowski also joined via phone.

Bob shared some great stories. One was about a tradition to plant a tree on lab grounds in honor of each retiree. Early in Bob’s career a lab project required the removal of an evergreen tree. Bob and some others dug up the tree and then wrapped and stored it in a barn used for chopping hay. Years later, the site director asked what had happened to that tree. Bob knew exactly where the tree was of course. When he and others went to check the tree’s condition, they found it completely covered in hay debris but still alive. The tree was dusted off and replanted near the main office. It has thrived for the past 37 years and Bob now considers it his tree. He commented there will be no need to plant a tree for him when he retires, Which, he says, is no time soon!

**Jim Lakey**, center, from the **University of Hawaii Institute of Marine Biology** at Moku O Lo’e Research center, accepts a 50 Year Honored Institution Award for rainfall measurements. The award was presented by the NWS Honolulu Forecast Office represented by Kelsey Angle, NWS Intern, left, and Kevin Kodama, Senior Service Hydrologist (SSH), right.

Jim commutes daily to Moku O Lo’e, which is a 24-acre island in Kane‘ohe Bay, surrounded by 64 acres of coral reefs designated by the state as a Marine Laboratory Refuge. Photo by OPL Mark Farnsworth.
Ted Bachurin, Dam Operator at the Gibralter Dam, City of Santa Barbara Water Department, in California accepts a 50 Year Honored Institution Award for the department.

The presentation was made by NWS Los Angeles Electronics Technician Russ Bacon. Photo by OPL Dessa Emch.

Tom Lavine, right, of Radio Station WFIW in Fairfield, IL, proudly accepts the 50 Year Honored Institution Award from NWS Paducah, KY, OPL Mike Nadolski.

Staff at WFIW has been taking observations since 1957. Tom has been the Chief Observer at the station since he arrived in 1981. Photo by Evansville, IN, Special Liaison Officer Ron Fields.
Kenton S. Ahrens, Observer at Cottonwood, TX, received the Dick Hagemeyer Award on behalf of the Ahrens Family for their 45 years of service. The award was presented by Joe Arellano, Jr., MIC, NWS San Antonio, TX.

Bill and Dorothy Bullard of Morrisonville, IL, were presented with the Dick Hagemeyer Award for 45 years of service. Billy Ousley, DAPM, of the Central Illinois NWS office, made the presentation during an Open House at the NWS office. Photo by Dan Kelly, MIT.
45 Year Dick Hagemeyer Awards

Ellsworth Evensvold of Tagus, ND, was presented a 45 Year Length of Service Award for his service as an NWS Coop Volunteer.

Ellsworth has made a very significant contribution to the climate history of the area by recording the 24-hour precipitation and snowfall data at Tagus each day. Ellsworth's faithful service is greatly appreciated and commendable.

The Coop station at Douglas, GA, is in the hands of its second generation of the Phillips family. Johnny Phillips, who worked at the city wastewater treatment plant, was the primary observer at the plant from 1962 to 1977, when the site was moved to his home.

He continued taking daily reading with help from his wife, Florine, and his son, Terrell. When Johnny passed away in 2004, Terrell took over the program and the station was moved to his home. When presented with the Hagemeyer Award, Terrell recalled how when he was a boy, he used to stand on a bucket to reach inside the Cotton Region Shelter to read and reset the max/min thermometers.

NWS was proud to present the Dick Hagemeyer Award to the Phillips Family of Douglas, GA. From left are Bart Hagemeyer, MIC, NWS Melbourne, FL (nephew of Dick Hagemeyer); Florine and Terrell Phillips; and Mike McAllister, OPL, NWS Jacksonville, FL.
Emmie Rusche, Observer at Prairie Mountain, TX, received the Dick Hagemeyer Award for 45 years of generous service. The award was presented by Joe Arellano, Jr., MIC, NWS San Antonio, TX.

Johnny Scott, received his Dick Hagemeyer Award from Paducah, KY, MIC Beverly Poole. Johnny has been faithfully taking temperature and rainfall observations at the cooperative weather site in Murray, KY, for the past 45 years.
Gerald and Marilyn Detzer of Locke, NY, were presented with a 40 Year Length of Service Award by Mitch Gilt, HMT, NWS Binghamton, NY. Members of the Detzer family have been taking weather observations for 75 years in this location.

Gail Mittel, left, of Eldorado, TX, received his 40 Year Length of Service Award from Buddy McIntyre, MIC, NWS San Angelo, TX. Gail shows off his cowboy hat and the NWS hat he received at the award presentation.
Betty and George Becker, left, of Petersburg, IL, show their 35 Year Length of Service Award with help from Billy Ousley, DAPM, NWS Central Illinois. The award was presented during an Open House at the NWS Central Illinois office. Photo by Dan Kelly, MIT.

Jerry King received a 35 Year Length of Service Award from NWS Seattle, WA, OPL Arthur W. Gaebel. Jerry is the NWS Observer in Forks, WA.

Dr. Douglas Bell, center, shows his 30 Year Length of Service award in his backyard on the Pacific Ocean. The award was presented by NWS Honolulu SSH Kevin Kodama, left, and Intern Kelsey Angle, right. Photo by OPL Mark Farnsworth.

Tommie Jo Cruse, right, of Flomot, TX, shows her 30 Year Service Award with help from OPL Jerry English of NWS Lubbock, TX. Photo by Paulette English. The presentation was made at the 97th birthday of Tommie Jo's mother.
25 Year Length of Service Awards

Alvin Brensing, center, of Hudson, KS, shows his 25 Year Length of Service Award. The award was presented by NWS Dodge City, KS, OPL Jesse Lee, left, and MIC Larry Ruthi. Alvin is the current president of Stafford County Flour Mill, where he has worked since 1937. Photo by Jamie Bielinski, Lead Forecaster at NWS Dodge City.

John Fink accepts his 25 Year Length of Service Award. The award was presented by Mitch Gilt, HMT, NWS Binghamton, NY. John is continuing nearly 60 years worth of precipitation data from the Oneonta area.

Observer Leo Noland was presented a 25 Year Length of Service Award for his observations in the Longton, KS, area. Presenting the award was Leon Wasinger, CPM, NWS Wichita, KS.

Don Nyquist, right, of Anaconda, MT, shows his 25 Year Service Award presented by Bruce Bauck, MIC, Missoula, MT. Don takes daily temperature and precipitation observations, which are included in the regional weather roundup. Don's weather expertise also extends to writing numerous climatological and weather-related articles over the years for local newspapers.
25 Year Length of Service Awards

**Larry Renner** from Almont, ND, was presented a 25 Year Award from Len Peterson and Charlene Prindiville from the NWS office in Bismarck, ND. Larry provides a great service for this rural area.

**Arnold Perttula** received a 25 Year Length of Service Award from NWS Seattle, WA, OPL Arthur W. Gaebel. Arnold has generously served as the Cooperative Observer for Grayland, WA.

**Lynn R. Winterton**, observer at Moon Lake, UT, was presented a 25 Year Length of Service Award for his generous service by NWS Salt Lake City OPL Steve Summy. Photo was not available.

**J. Lowell Smith** of Wautoma, WI, shows his 25 Year Length of Service Award. The presentation was made by Dan Clark, HMT, of NWS Green Bay, WI.

**Annie Weems**, center, the Cooperative Observer at Rotan, TX, and husband, Virgil, show Annie's 25 Year Length of Service Award. The award was given by NWS San Angelo, TX, CPM Eva Mullen.
**25 Year Honored Institution Awards**

Anna Kastner accepts the 25 Year Honored Institution Award for the **California's Feather River Fish Hatchery** in Oroville, CA. The Hatchery's mission is to mitigate the effects of the Oroville Dam on the Feather River fishery. Currently, more than 51,000 spawning adult salmon pass through the Hatchery each year. The award was presented by Angus Barkhuff, CPM, NWS Sacramento, CA.

Minnkota Power Cooperative in Center, ND, began Observations in 1982. The official observer for the station is Denise Brorby; however, the 25 Year Honored Institution Award was accepted by Station Manager Stu Libby. The award was presented by Bismarck MIC James Meyer and CPM Sandra Wiche. Stu was present when the observing station was opened in 1982. The station provides temperature, precipitation and snow data.

**20 Year Length of Service Awards**

From left, NWS Des Moines, IA, Meteorologist Roger Vachalek helps present a 20 Year Length of Service Award to **Lloyd Foust**, Coop Observer at Indianola, IA, with help from Hydrologist Marian Baker. Photo by HMT Steve Teachout.

John Heiser from Grassy Butte, ND, received a certificate and pin for his 20 years of volunteer service to NWS Bismarck, ND. John takes observations at his ranch east of Grassy Butte. John is an excellent observer and keeps accurate, detailed records.
Rodney and Lory Olsen, observers at Neola, UT, were presented a 20 Year Length of Service Award. The Olsens are outstanding observers and take extra care to ensure not a single day is missing in their weather records. The award presentation was made by NWS.

Leon Bailey, Observer at Spicewood, TX, received a 15 Year Length of Service Award for his dedication. Pictured with Leon is his wife, Nina. The award was presented by Pat Mcdonald, HMT, San Antonio, TX.

By minding the river gage on the Vermillion River near Vermillion, SD, for the past 15 years, Patricia Frazee is carrying on a family tradition begun by her father. She is a dependable partner in the hydrology program at the NWS Sioux Falls, SD, office. The award was presented to Patricia by DAPM Donald Morin and HMT Donald Miller. Patricia declined a photo.

Jeanie Beaman of Avery, TX, accepts a 15 Year Service Award for herself and husband, Larry. The award was presented by Aaron Stevens, OPL, NWS Shreveport, LA.

Kenny Landfried, the Coop Observer at Roscoe, TX, shows his 15 Year Length of Service award with help from Eva Mullen, CPM, at NWS San Angelo, TX.

Tim McGonagle is the Coop Observer at Scott City, KS. He was recently awarded a 15 Year Length of Service Award by Jesse Lee, OPL, NWS Dodge City, KS.
Wayne Langford shows his 15 Year Award for his service at Stonyford, CA. Wayne originally took readings at the East Park Reservoir Dam. In 1996, the Forest Service announced it would close the Stonyford station and that the station at East Park was no longer practical, so Wayne took over the rainfall readings at his home in Stonyford, solving two problems. At 93 years young, Wayne is the oldest Coop Observer in the NWS Sacramento area. In addition to weather, he enjoys gardening and working around the house. The award was presented by CPM Angus Barkhuff.

Dr. Harold Larsen of the Colorado State University Orchard Mesa Research Center shows his 15 Year Length of Service Award and pin presented by NWS DAPM John Kyle. The Research Center has been taking daily temperatures, rain, snow and evaporation observations since 1963.

Bruce Pyka, Coop Observer at Fredericksburg, TX, received a 15 Year Length of Service Award from Pat Mcdonald, of NWS San Antonio, TX.

Dave Popp shows his 15 Year Length of Service Award for precipitation observations taken at the Buckhorn Coop Station in Montgomery Creek, CA. The award was presented by Angus Barkhuff, CPM, NWS Sacramento, CA.

From left, MIC Larry Ruthi, NWS Dodge City, KS, presents a 15 Year Length of Service Award to Chris Lawless of Wilmore, KS. Jesse Lee, OPL, helps show the award. Photo by Jamie Bielinski, Lead Forecaster, NWS Dodge City.
15 Year and 10 Year Length of Service Awards

**Kathy Ratliff**, center, and **Pepper**, bottom left, of Knightstown, IN, received their 15 Year Length of Service Award. Kathy has been an excellent precipitation and snow observer and was one of the first to shift to Web reporting via WxCoder. The award was presented by DAPM Mike Shartran and MIT Ashley Brooks, NWS Indianapolis. Photo by Al Shipe, Service Hydrologist.

**Stratford, IA, Observer Marvin Sorber** shows his 15 Year Length of Service Award. The presentation was made by Brad Fillbach, HMT, NWS Des Moines, IA.

**Jamie Brite** of Telegraph, TX, shows her 10 Year Length of Service Award. Photo by Eva Mullen, CPM at NWS San Angelo, TX.

**Virginia Bird**, Coop Observer from Adairsville, GA, accepted her 10 Year Length of Service Award from Frank Taylor, NWS Atlanta, GA.

**Harold Greek** from Mohall, ND, near the Canadian border, received a certificate and pin for 10 years of Coop service to NWS Bismarck, ND. Each day at 6 am, Harold records and reports daily maximum and minimum temperatures and precipitation.

**Irene Corp**, Cooperative Observer at Tecumseh, MO, holds her 10 Year Length of Service Award presented by HMT Larry Dooley, NWS Springfield, MO.
10 Year Length of Service Awards

April Meyers and her dog Sage accept a 10 Year Length of Service Award. April takes precipitation observations at West Point, CA, nestled in the beautiful foothills of the Sierra Nevada Mountains of Northern California. The award was presented by Angus Barkhuff, CPM, NWS Sacramento.

Rob McGriff, left, of North Vernon, IN, received a 10 Year Service Award from NWS Indianapolis DAPM Mike Shartran. Also at the ceremony were HMTs Phil Gray and Ed Terrell. Rob had just returned home after a tour of fighting forest fires in the West. Photo by MIT Ashley Brooks.

Charles Uttech of Hunts Corners, NY, accepts his 10 Year Length of Service Award. The award was presented by Mitch Gilt, HMT, NWS Binghamton, NY.

Observer Dale Mutro, left, enjoys monitoring and tracking Ocracoke Island's weather on North Carolina's Outer Banks. Dale's love for the weather has been shown through his outstanding, reliable and conscientious service to the Coop program and as a Skywarn Spotter. The award was presented by MIC Thomas Kriehn, NWS Newport, NC. Photo by DAPM Central Wills.

Charles E. Peters, Observer at Llano, TX, received a 10 Year Length of Service Award. Pictured with Charles is his wife, Sylvia. The award was presented by Pat Mcdonald, HMT, NWS San Antonio, TX.

Helen Weidner, Cooperative Observer at Spring Branch, TX, received a 10 Year Length of Service Award. The award was presented by Pat Mcdonald, HMT, NWS San Antonio, TX.
December, January, February
Temperature Outlook
From the Climate Prediction Center

THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID DJF 2007
MADE 15 NOV 2007

EC MEANS EQUAL
CHANNELS FOR E., N., S.
A MEANS ABOVE
B MEANS BELOW