

SPRING 2001 ISSUE #2

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Welcome to Seabreeze

Welcome to the second installment of Seabreeze, the National Weather Service in Jacksonville's official web newsletter for Northeast Florida and Southeast Georgia. In it, you will find interesting weather-related articles of local interest, as well as features such as new and upcoming website improvements, a summary of last season's weather, planned National Weather Service events and activities, and SKYWARN storm spotter information. In addition, over the coming months, you will learn more about what your local National Weather Service office does on a daily basis, and how we work to provide you with forecasts and wamings for the Northeast Florida and Southeast Georgia area.

This web-based newsletter will be posted on the National Weather Service Jacksonville webpage on a seasonal basis, around mid-January, mid-April, mid-July, and mid-October. The NWS Jacksonville website can be accessed at the following address: http://www.srh.noaa.gov/jax.

As always, we welcome your input as to how we can serve you better. If there is a topic you would like to see featured in a future edition of Seabreeze, let us hearfrom you. Here are some useful e-mail addresses:

Website/Webletter
Weather Radio
Warnings/Outreach
Other Comments
Website/Webletter

scott.carroll@noaa.gov
michael.mcallister@noaa.gov
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Landscaping Tips for Wildfire Safety & Prevention

by Marie Trabert

Wildland fires destroy hundreds of homes and acres of land each year. Many people do not realize that proper lands caping techniques can save their homes. Dead shrubs and trees provide fuel for fires and should be removed from your property. Some plants, such as pine trees and palmettos, are more flammable than others. Your local nursery or county extension service will be able to recommend plants and vegetation that are fire-resistant. Create a fire-safe zone around any structure by thinning trees and shrubs within 30 feet. If your home is built in a pine forest, this distance should be increased to 100 feet.

TIPS FOR FIRE-SAFE LANDSCAPE MAINTENANCE

Remove all dead trees, shrubs, and other vegetation.
Replace flammable plants with fire-resistant plants.
Rake leaves, dead branches, and twigs.
Within 30 feet, prune plants and trees regularly.
Beyond 30 feet, remove debris and low branches up to 10 feet from the ground.
Irrigate within 100 feet during the dry season.
Stack firewood at least 30 feet from your home.
Mow grass on a regular basis.
Store gasoline and flammable materials properly.
Use care when refueling lawn equipment.

TIPS FOR FIRE-SAFE LANDSCAPING

Select plants with high moisture content that resist ignition. Plant hardwood trees and space trees 30 feet apart. Plant drought-tolerant vegetation within 3 feet of structures. Create fire-safe zones with patios, pools, stone walls, or stepping stones.

Rocks, mulch, flower beds, and gardens make effective fire

Design shrub or plant groups with 10 to 15 foot separation.

January-March 2001 Weather

January was colder and drier than normal. At Jacksonville International Airport, the average temperature was an even 50 degrees, which was 2.4 degrees below normal. The average daily high was 63.4 degrees, and the average daily low was 36.5 degrees. The highest temperature for the month was 83 on the 19th, which also tied the record high temperature for the date. The lowest temperature for January was 22 degrees on both the 1st and 2nd.

Through the end of January, Jacksonville had experienced 29 days at or below freezing during the winter. The normal for the entire winter is 15 days. There were 14 days with temperatures below freezing in January alone. Another interesting side note was the fact that there was only one additional day with below freezing temperatures this winter, and this occurred in March, not February!

Rainfall for January totaled 0.91 inches, which was 2.40 inches below normal (dry by even January standards). The greatest 24-hour rainfall total was 0.28 inches on the 23rd. The highest rainfall total from around the area was 7 inches even at Guana River State Park. The lowest amount was 0.43 inches at both Crescent City and Starke. There was 1 thunders torm day at Jacksonville International.

For the month of January, the peak wind gust was 33 mph on the 19th. There were 466 heating degree days (45 above normal) and 5 cooling degree days (26 below normal). **JB/TM/PK**

February was a big contrast to January temperaturewise. However, rainfall was still well below normal. At JIA, the average temperature for February was 60.3 degrees, which is 5.1 degrees above normal. The average daily high was a warm 71.0 degrees, while the average low was 49.6 degrees. The highest temperature was 85 degrees on the 25th (a new record high for the date). The lowest temperature was 33 degrees on the 6th.

Rainfall for the month of February totaled 0.68 at the airport, which was 3.25 inches below normal. The greatest 24-hour total was a mere 0.39 inches on the 3rd through 4th. The most rain from the area reporting sites was 3.54 inches at Big Talbot Island, while the lowest was only 0.06 inches at Orange Springs.

For the month, the highest wind gust was 26 mph on the 17th. There were 170 heating degree days (124 below normal) and 45 cooling degree days (27 above normal). All-in-all, February was a good month for energy savings. **TM/RK**

March was windy and cool with above normal rainfall around the area. Many areas around Northeast Florida and Southeast Georgia received good rains during the month. At the airport, the average temperature was 60.2 degrees, which is 1.1 degrees below normal. The average high temperature was 70.0 degrees, while the average daily low was 49.6 degrees. The highest temperature for the month was 86 degrees on the 3rd (which was a new record for that date). The lowest temperature was 32 degrees on the 8th, the last free ze of the season.

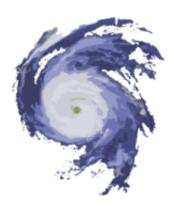
Rainfall for March was 5.48 inches at the NWS office in Jacksonville, which was 1.80 inches above normal. The most rain in a 24-hour period was 1.31 inches on the 4th of the month. Rainfall around the area ranged from a whopping 10.70 inches in Live Oak to 3.08 inches at Mayport.

Winds were quite strong during March, with the highest gust at the airport of 41 mph on the 20th. There were several days with wind speeds over 30 mph, and the average daily wind speed was 9.1 mph. For energy consumption purposes, there were 189 heating degree days (20 above normal) and 48 cooling degree days (which is normal). **RK**

The outlook for May through July 2001 calls for above normal temperatures and below normal rainfall for the area.

For more climate information, visit the <u>NWS</u> <u>Jacksonville climate page</u>.

Hurricane Awareness Week May 21-25, 2001



History teaches that hurricane disasters have occurred in the past and will again in the future. A lack of hurricane education and planning are common threads among all major hurricane disasters. By knowing your vulnera bility and what actions you should take, you can reduce the effects of a hurricane disaster.

The goal of Hurricane Awareness W eek is to educate the public about the hazards of hurricanes and provide them with knowledge which can be used to take action.

Hurricane hazards come in many forms: storm surge, high winds, tornadoes, and flooding. Unless you live in a coastal or low-lying area, an area that floods frequently, or in manufactured housing, it is unlikely that emergency managers will ask you to evacuate. That means that it is important for you and your family to have a preparedness plan that makes you feel as safe as possible in your home.

Please visitthe <u>National Hurricane Center's Hurricane</u> <u>Aware ness W eek website</u> for more information.

Here are some additional hurricane-related links:

Florida Division of Emergency Management

Georgia Emergency Management Agency

NWS Jacksonville Tropical Page

NOAA Weather Radio Voice Improvement Plan

The National Weather Service has initiated a voice improvement plan for NOAA Weather Radio (NWR). An improved voice will enable the NWS to deliver all-hazard information, especially emergency weather messages, more quickly and accurately to you.

The National Weather Service will develop the improvement based on a competitively bid and selected new voicing system. The NWS will evaluate proposals received on the basis of voice quality, speed of the system, integration of the voice with the existing console system, and cost.

Feel free to visit the <u>NWR Voice Improvement</u> <u>homepage</u> and comment on the voices. You may check the program status <u>here</u>.

What's New on the Website?

There have been many changes to the NWS Jacksonville homepage over recent months. Many of the changes have been aesthetic, but several have hopefully improved the functionality and usefulness of the site. Here is a list of the major changes to the webpage:

- Added links to surrounding marine forecasts, offshore forecasts, and high seas forecasts on the marine page.
- Quick front page navigation to city forecasts and frequently visited areas of the homepage.
- Added links to previous, current, and next month's averages and records from front page climate tables.
- Previous versions of text products available, as well as printer-friendly text.
- Automatic notification of data server outages and reminders of NOAA Weather Radio tests, both under "Weather Headlines" on the front page.
- Improved format of tropical cyclone advisory page.
- Clickable USGS river stage maps.
- New climate data table on front page with latest climate information.
- Office tour section started.
- Added clickable national NWS office map.
- Added several Gulf of Mexico tides, as well as improved tide pages.

As always, we welcome your comments, suggestions, and complaints about the webpage. You may e-mail the web master at SR-JAX.webmaster@noaa.gov.

Changes in the Forecast Process

by Jason Hess

The look of forecast products from the National Weather Service will be taking a graphical turn over the coming year. Text-based products like the Zone Forecast Product (ZFP) will actually be created via grid-based and table-based products. During the summer of 2001, we will be loading a new suite of computer software called the Interactive Forecast Preparation System (IFPS). This will allow the meteorologist on duty to draw the forecast rather than write it. Currently, a forecast is prepared by reviewing the computer models and weather guidance...then writing a text product called the ZFP, which is broken down into several groupings depending on how complex the weather pattern is.

Beginning this fall, the staff will start using IFPS, which will change portions of the forecast process. Forecasting will continue to begin with a review of computer model guidance. However, after a model of choice is selected, this model can be used by IFPS as a starting point for the forecast. The model of choice is loaded into IFPS and displayed onto grids that show the Jacksonville County Warning Area (CWA). As you can see in the image, as many as 10 different forecast parameters are listed for the forecaster to change to fit the local weather effects across Southeast Georgia and Northeast Florida. The forecast will be in 1-hour time steps for 2 days...then at 3- to 6-hour time steps for days 3 to 7.

After the forecaster has completed modifying the grids, focus turns to the next part of IFPS- converting these grids into tables or forecast matrices. The forecaster will group the CWA into zones of similar weather conditions, and then open the table display. This image shows 4 different zone breakouts across the CWA and the table or matrix that belongs to each. On the top of the image is a window that shows the resulting text that will be issued in the text versioin of the ZFP. Graphics can be created from the matrices that will be available in a new product in late 2000 or early 2001. Here is an example of the digital zone forecast matrices that will display weather at 3-hour increments and include a tabular extended forecast through 7 days just below that.

As can be seen from the sampling of products, we are in a period of change here at the National Weather Service. We are striving to make changes to the forecast process to display the best possible products on the Internet that contain the most complete and detailed weather information possible.

Upcoming Additions to the Website

Several improvements to the NWS Jacksonville webpage are planned in the coming months. Among these planned changes are clickable tide maps, a weather glossary, and frequently-asked questions. In addition, improvements to the text-only page are planned, as well as more pictures on the office tour page. Stay tuned!!!

What We Do at the National Weather Service

Please take the opportunity to visit our office tour page for images of everyday operations at your National Weather Service. The first images are of mainly the upper air program at Jacksonville.

Large, hydrogen-filled balloons are launched twice daily to retrieve atmospheric data at 0000 and 1200 Universal Time (7am and 7pm during standard time; 8am and 8pm during daylight time). Tethered to the end of the balloon is a radios onde, which is a small electronics package that records temperature, humidity, and barometric pressure data through the atmosphere. Wind information is obtained by tracking the balloon's location. All of this meteorological data is radioed back to the weather office, quality-controlled by our hydro-meteorological technicians (HMT's), then sent to the Hydro-meteorological Prediction Center (HPC) in Camp Springs, MD. The data is then fed into computers which generate the model data our forecasters use to aid in the creation of the forecast for the area.



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