

Web Sites That Turf Managers Can Use

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Weather and the Net

The recent arrival of spring and the winter-long media dialogue about the effects of El Nino sent me looking for good sites on the Internet to find both images and information about weather. Two sites that I recently came across approach the subject from different points of view, but both can be credible resources for turfgrass managers with a good browser and a reliable internet service provider (ISP).

Agricultural Weather.com - This site calls itself "Agricultural Weather dot Com" and touts itself as the "the Internet's most complete Agricultural weather". Its Internet address (URL) is www.agriculturalweather.com.

This site, owned by Weather Site Inc. of Coral Gables FL, is a well laid out, no frills site that combines weather and agricultural market data (farm reports and commodity prices).

The weather coverage at the site appears to be bare bones, but looks are deceiving. It is quite thorough.

The site has a series of "click to expand" maps - such as a "current national radar map", a current national surface temperature map, and several medium range forecast maps for temperature and precipitation.

Located to the left of these graphics is a "wolf in sheep's clothing" in the form of a innocuous looking columnar listing of forecasts and current condition reports for all 50 states. A quick review of a few of the listed states reveals a massive amount of climate, weather, and other information about the listed state.

The information listed by state ran from

an air pollution index, climate summaries, current and forecast weather, hydrologic data, and river and flash flood forecasts for Arkansas to climate summaries for all large cities, marine forecasts, hourly weather summaries, travel advisories, and hazardous weather outlooks for New York and min/max temp and precip tables, temperature and precipitation summaries and biweekly water resources reports for Pennsylvania.

Hidden down below the farm reports on the left side of the site are a series of links to visible and infrared satellite images and links to the Climate Prediction Center's (CPC) 10 to 14 day temperature/precipitation maps, 14 day soil moisture maps, and the 1-3 month national temperature and precipitation forecast maps.

Still further down the left side are two links to computerized precipitation model forecasts for the next 48 hours. These maps leave no question about what precipitation the next 48 hours will bring. These models produce impressive graphics.

Impression: Although I could do without the farm reports, this site is loaded with information that turf managers and farmers need to plan their short to longer term activities. Don't let the utilitarian look fool you, this is a good weather site.

WeatherNet - This site is produced by The Weather Underground at the University of Michigan at Ann Arbor. They call the site "the Internet's premier source of weather information" and the hits counter at the bottom of the opening page proves it with 77 million plus hits. Its URL is <http://cirrus.sprl.umich.edu/wxnet>.

As utilitarian and sparse as the Agriculturalweather.com site looks, this site is rich with information and features. This site is a weather weenies idea of heaven. The open-

ing page starts with hot or new features, but the listing of the site's main features really sets the tone for this site as a serious weather watchers location.

The main features are:

WeatherSites - a comprehensive list of over 300 WWW, gopher, telnet, and FTP weather sites on the Internet.

USA Weather - city by city forecasts, current conditions, warnings and graphics for all 50 states.

Radar and Satellite - access to Nexrad and color satellite images.

WeatherCams - live images of weather conditions at over 700 locations in North America.

WeatherMaps - a comprehensive listing of surface and upper air maps, along with temperature, regional weather, and jet stream maps.

Weather Software - a listing of over 24

PC and Mac software applications to chart and follow the weather. Perhaps the best feature of this feature packed site is the clickable Nexrad and regular radar national map. As good as the regular radar that this site can produce is, the Nexrad radar, the recently completed Doppler radar system, is several times better. It is so sensitive that on clear days it can show the temperature differences in the atmosphere as well as a flight of birds. On days with precipitation, it can show the accumulated precip totals as well as highlight areas that may spawn severe weather. Give NOAA a few more years working with this system and we might be pleasantly surprised as to the extra information they learn to produce.

This is an industrial strength Internet weather site. It may not have all the minutia the Agriculturalweather.com has, but it doesn't need it - this is a very impressive site.

RESEARCH SUMMARIES

Dollar Spot Resistance

Plant Disease

Volume 81, Number 11.

Control of Dollar Spot of Creeping Bentgrass Caused by an Isolate of *Sclerotinia homeocarpa* Resistant to Benzimidazole and Demethylation-Inhibitor Fungicides:

L.L. Burpee, Dept. of Plant Pathology, University of Georgia, Georgia Experiment Station, Griffin

Failure to control dollar spot with with DMI fungicides representing pyrimidine and triazole groups was first reported in 1992 by Vargas, Golembiewski and Detweiler. Confirmation of resistance in isolates of *S. homeocarpa* was disclosed in 1995.

Laboratory and field results indicate that at least one isolate was resistant to both propiconazole and thiophanate-methyl. The reduced sensitivity of the particular isolate to chlorothalonil in vitro was not evident in the field.

Fluazinam, a nonsystemic, pyridylaniline compound, was the only fungicide tested that suppressed dollar spot caused by the isolate to a threshold of less than five percent disease for more than 21 days.

The dose-response data collected in vitro and in the field in 1996 indicate further that a second isolate responded similarly to increasing concentrations of fluazinam. The long-term control of dollar spot provided by Fluazinam was surprising for a nonsystemic material. However, due to extremely low inhibitory concentrations, residual suppression of fungal growth may be longer than other nonsystemic fungicides on leaves, on shoots, and in turfgrass thatch. Fluazinam will be a useful fungicide for management of dollar spot caused by benzimidazole and or DMI-resistant strains of *S. homeocarpa*.

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