Planning to Spray Pesticides
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FTGA Regional Seminar
# Jacaranda Country Club
Plantation, Broward County, FL
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Getting a prediction for tomorrow's wind speed and rain probability.

Search Google for "national weather service Miami" or other big city, Melbourne, Tampa Bay. Click whatever appears to be the top government link, e.g., https://www.weather.gov/mfl/

Look down the page (usually the second map on the page) for the map that says, "Click a location below for detailed forecast" and position your mouse at your location and click.

Look for a new map to appear with a bright green square which is the "Forecast Area." Click again if you need to reposition the square on your area of interest. Make sure the square is centered over land, not ocean. Sometimes in smartphones it is not possible to reposition.
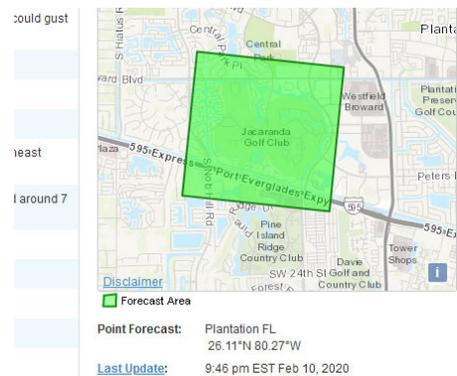
In the new page that emerges, go down the page and look in the lower right to see the "HOURLY WEATHER GRAPH" and click it.

The "Hourly Weather Forecast Graph" will appear with instructions how to go "Forward 2 Days" (at your peril)." For today this says that at 11:00 am, at Jacaranda Country Club, precipitation probability is 4% and wind speed is predicted to be 8 mph. There is also a link under "Additional Forecasts and Information" for "Tabular Forecast" which gives you actual numbers instead of a graph.

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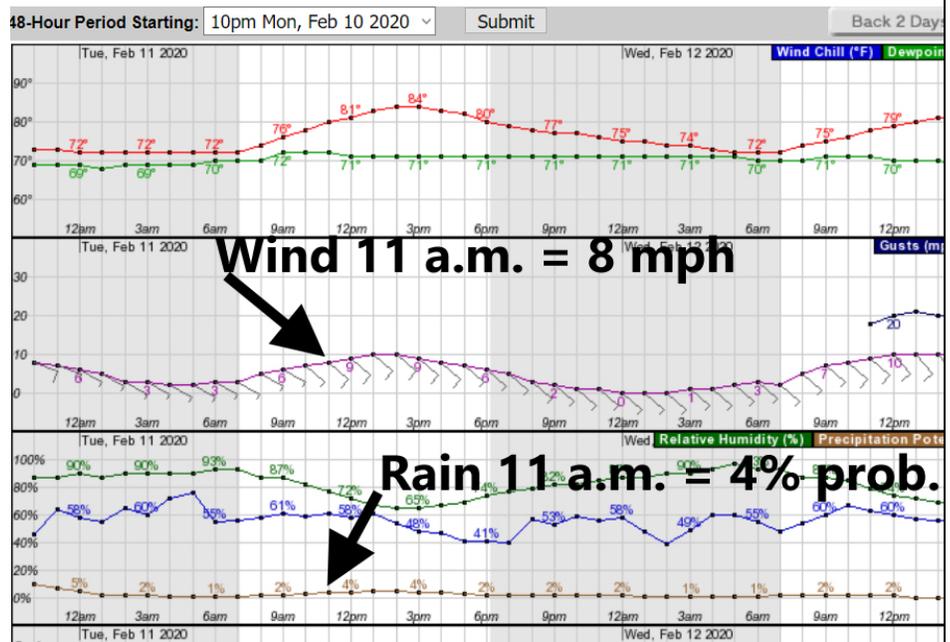
[1] Agronomist, Phil Busey Agronomy Consulting Inc., Certified Crop Adviser, Certified Professional Agronomist, Certified Landscape Inspector (LIAF #2016-0160), and member of Brookside Society of Professional Consultants.

Spray Prep Checklist

✓	Do this before spraying	Bad outcomes in not doing
☐	Accurately identified target pest, site, crop and environmental conditions	Wrong pesticide damaged turf, failed to solve the problem and wasted money
☐	Surveyed and measured area to be treated and looked for obstacles and human uses	Bent up the spray boom by running it into a tree
☐	Carefully read and understood the pesticide label, not just application rate	Missed details on nozzle tip type and droplet size, so product ineffective
☐	Applicators and handlers properly licensed for this type of application on this property	While spray application went well, applicator and boss were not certified, and both were fired
☐	Appropriate personal protective equipment (PPE) is available for applicators and handlers	Applicator's health was endangered and developed a severe skin rash
☐	A standard method for recording and keeping pesticide records is available and will be used	Pesticide damage later discovered, unexplained because records, if any, made no sense
☐	Applicator has inspected the different parts of the spray equipment—in good condition	Hoses restricted due to past failures to rinse, restricting nozzle discharge and spray rate
☐	Have proper nozzle tips and replacements for pressure and rate based on label	Bad combination of nozzle and pressure caused wrong droplet size and loss of control
☐	Predicted wind speed will be less than 4–6 mph, confirmed during spraying	Spraying when wind speed over 6 mph caused drift and damage to neighboring farm
☐	Sprayer is ready and was checked with pure water at least one day before planned use	Unanticipated leaks and distribution problems caused abandonment of job and damage
☐	Ground speed, nozzle spacing and discharge measured and calculated for spray rate	Too much or too little product applied, so sprayed at double rate, and ran out in middle of application
☐	Tested discharge of each nozzle and observed uniform pattern of water on asphalt	Spray nozzles tips not identical, causing skips and gaps, lack of uniformity and damage
☐	Planned a method for turning off spray on turns at the ends of passes	Not turning off spraying caused crescent-shaped overlaps at the ends of the field
☐	Foam marker or other system functioning to achieve precise overlap of successive passes	Overlaps were guessed, causing double application and damage stripes
☐	Name of the herbicide carefully read and compared letter-for-letter with intended product	A different herbicide with similar name caused the total destruction of an entire field
☐	After the previous use of equipment, it was properly rinsed	Previous pesticide, not cleaned out, ate gaskets or killed sensitive plants
☐	Agitator checked and is working properly to keep materials mixed properly	Most of the active ingredient sprayed at one end of the field, causing damage
☐	Measured height of nozzle tips above target, consistent for nozzle spacing	Boom height too low caused "striping"
☐	There is a reliable and accurate method for controlling ground speed	A foot pedal was used to control speed; it was way off and results were horrible
☐	Schedule recommended second application x days after first application	This couldn't be done because it landed on a holiday; weeds recovered before retreatment
☐	Can see liquid level in the tank under worst-case conditions	Could not read liquid level in early morning light, so ran out of product mid-operation
☐	Only a few products were mixed in the tank and all had been checked out in mixture	The 8 different ingredients in mix caked into a thick, gelatinous mass that was discarded
☐	Adjuvant used was exactly the one indicated on the pesticide label	Extra adjuvants used, beyond what was called for on the label, interfered with effectiveness