FAWN: Weather Data and Tools for Florida Citizens

Lee Staudt, FAWN Field Engineer





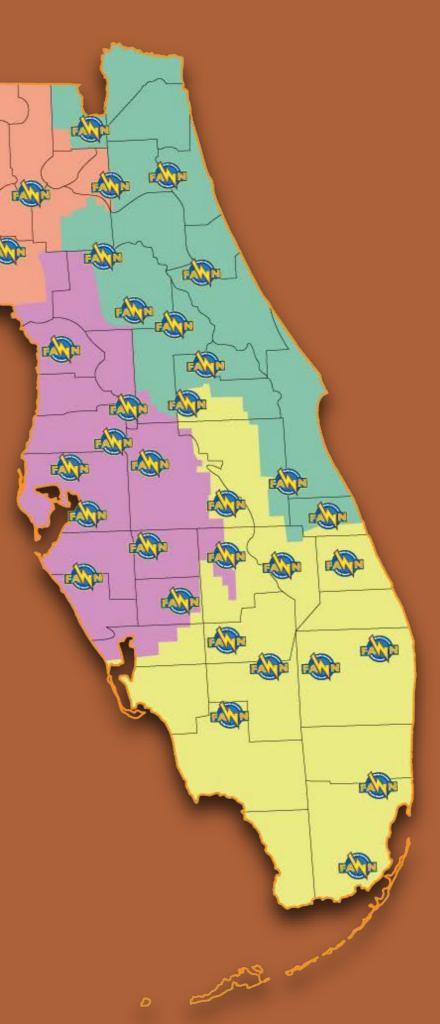
1997 Freeze Need for <u>ag</u> data UF petitions state for funds FAWN born with 16 sites

42 Sites

Routine Maintenance

Annual Field Testing

Data Quality Control







Data/Forecasts **Irrigation Scheduling Chemical Application Cold Protection** My Florida Farm Weather



HOME DATA ACCESS TOOLS	CLIMATE ABOUT NEWS DONATE SPONSORS	
	35 35 35	
Latest Observations		
Graphic Weather Data	Wet Bulb Temp 39 43 40 42 44 45	
NWS Forecast	Daily Min Temp Temperature	
RADAR	Daily Avg Temp Wednesday February 10, 2016 9:53 AM EST 50 46	
	Daily ET Wellington	
My Florida Farm Weather	2/10/2016 9:45 AM EST	49 51
	Daily Total Rain 53 °F (a) 52 51 50	
	Weekly Total Rain Wind 10 mph 52 51	
FAWN Freeze Alert System Receive weather alerts on your	Rainfall 0 in. 52 52 53 53 Pressure 1019 mb 54 53 52 53 53	
phone and/or by email	FCST Min Temp Dew Point 34 °F	
	Today Tonight Thursday	
	55 57	
Tweets Sollow		
FAWN 2h		
@UF_FAWN	Mostly Sunny Clear Sunny	
SEABRING wind sensor is intermittent; all other sites & sensors are working & reporting	High: 62 °F Low: 41 °F High: 65 °F	

Florida Automated Weather Network

SS	TOOLS	CLIMATE	ABOUT	NEWS	DONATE	SPONSOR	S	
	Tool	S						
	Cold Protection		Irrigation Your Virtual Lawn Tool		Tools Citrus Pestie	cida Tool	Climate Tools Climate Risk »	
	Citrus Leaf Freezing		Vegetable Irrigation Scheduler				Degree-Days Calculator »	
	FAWN Desktop Widgets FAWN Freeze Alert System		Citrus Irrigation Strawberry Irrigation		Air Tempera Video Prese	ature Threshold entations	Chill Hours calculator » Strawberry Advisory System »	
			Urban Irrigati Row Crop Irr	ion Scheduler igation	The FAWN (Overview Video	Citrus Copper Application Scheduler »	
r			Evapotransp				ARID Monitoring »	
Svot			Fact Sheets Home Irrigati	on Presentation				
Syst on yc			Application F	Rate Worksheet				

Current Observation

Current Observation

Current Regional RADAR

Lecanto 2/10/2016 9:45 AM EST

Type Another Station Name

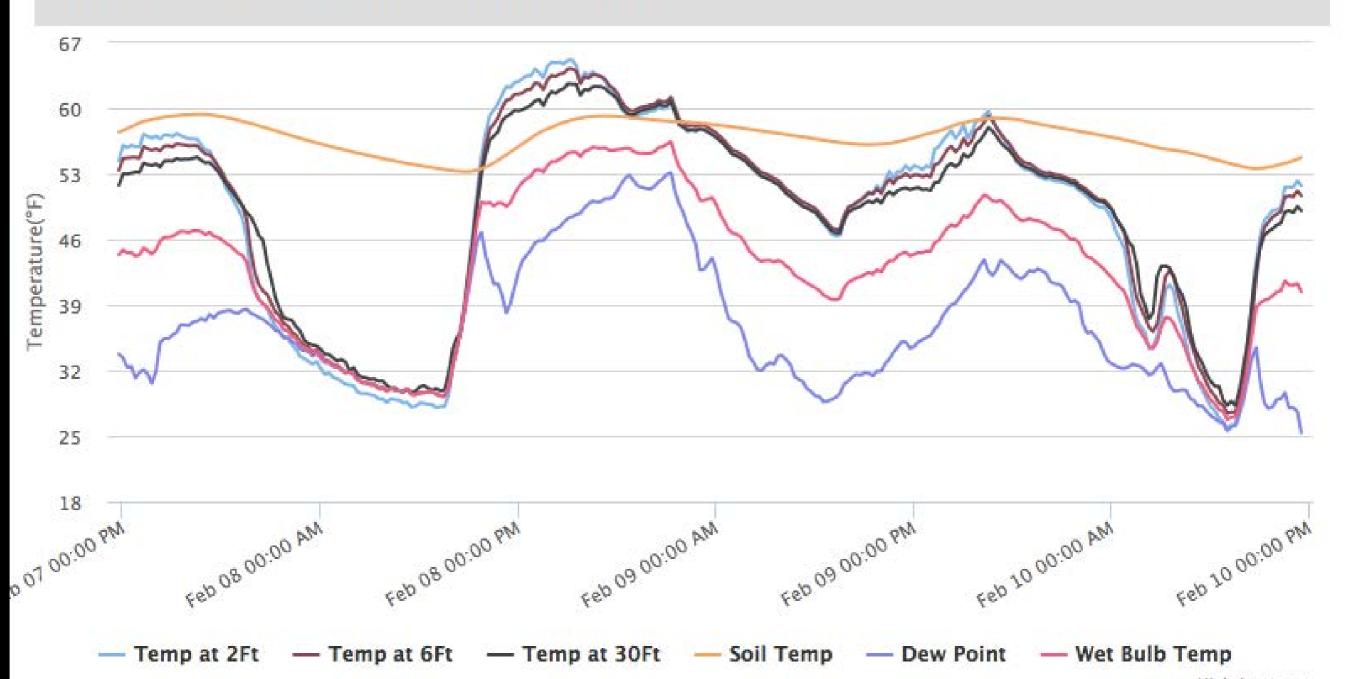
Graphic Forecast	Temp @ 2m:	Wind Speed @ 10m:	Relative Humidity:
Graphic Weather Data	48 °F	10 mph	45 %
Soil Type	Temp @ 60cm:	49 °F	
Station Location	Temp @ 10m:	47 °F	
Station Photos	Soil @ -10cm:	54 °F	
Nearby Non-FAWN Stations	Dew Point:	28 °F	
,	Wind Dir @ 10m:	341 °	
KCGC - W Bicentennial Park Dr, Crystal	Rainfall:	0 "	
River To FAWN station: 5.1 mile	Pressure:	1020 mb	
Temperature: 69.8 °F Rainfall: NA "	Average Rad:	439 W/m2	
Observed: 1/31/2016 3:15 PM EST			

D3617 - S Crooked Tree Path, Homosassa To FAWN station: 5.5 mile Temperature: 69 °F Rainfall: NA " Observed: 1/31/2016 3:15 PM EST

Latest Reading

Temp at 2Ft: 51.69 Temp at 6Ft: 50.65 Temp at 30Ft: 49.05 Soil Temp: 54.75 Dew Point: 25.34 Wet Bulb Temp: 40.36

For Temp at 2Ft the Maximum is 65.16 and the Minimum is 25.79



Urban Irrigation Scheduler : Gainesville

This irrigation type has an average application rate of **0.5**"/hr and this is used to calculate all the run times below.

Turn your controller ON or OFF based on the following table

Station	Irrigation*	Seasonal Timer Setting	Recent Rain [†]
Alachua	OFF	100%	2.59" in last 3d
Bronson	OFF	100%	0.55" in last 24hr
Citra	OFF	100%	
Putnam Hall	OFF	100%	

* Be sure your watering schedule coincides with <u>local watering restrictions</u>.

IRRIGATION APPLICATION RATE WORKSHEET

CALCULATE YOUR SYSTEM'S APPLICATION RATE

I. Record the amount in inches collected in each can.

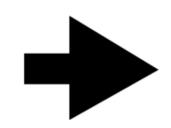
- _____
- CAN 3 _____
- CAN 4 _____ CAN 5
- CAN 6

CAN 1

CAN 2

- CAN 7
- CAN 8
- CAN 9 _____
- CAN 10 _____

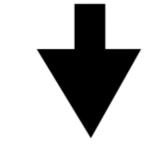
TOTAL ____



II. Calculate the average amount collected.

AVERAGE = TOTAL / NUMBER OF CANS

AVERAGE = _____



III. Adjust amount to hourly rate

APPLICATION RATE = AVERAGE x 4 (15 min. x 4 = 60 min.)

APPLICATION RATE = _____ inches/hour

FAWN FACTS: Time clocks

The irrigation controller, or time clock, is the brains of your irrigation system. It controls when and how long your system operates, and understanding it is essential to proper care of your lawn. Improper operation of your time clock can waste water and harm your lawn – too much water can cause an increase in disease, weeds, and pests.

Your time clock needs to be "told" 3 things for proper operation:

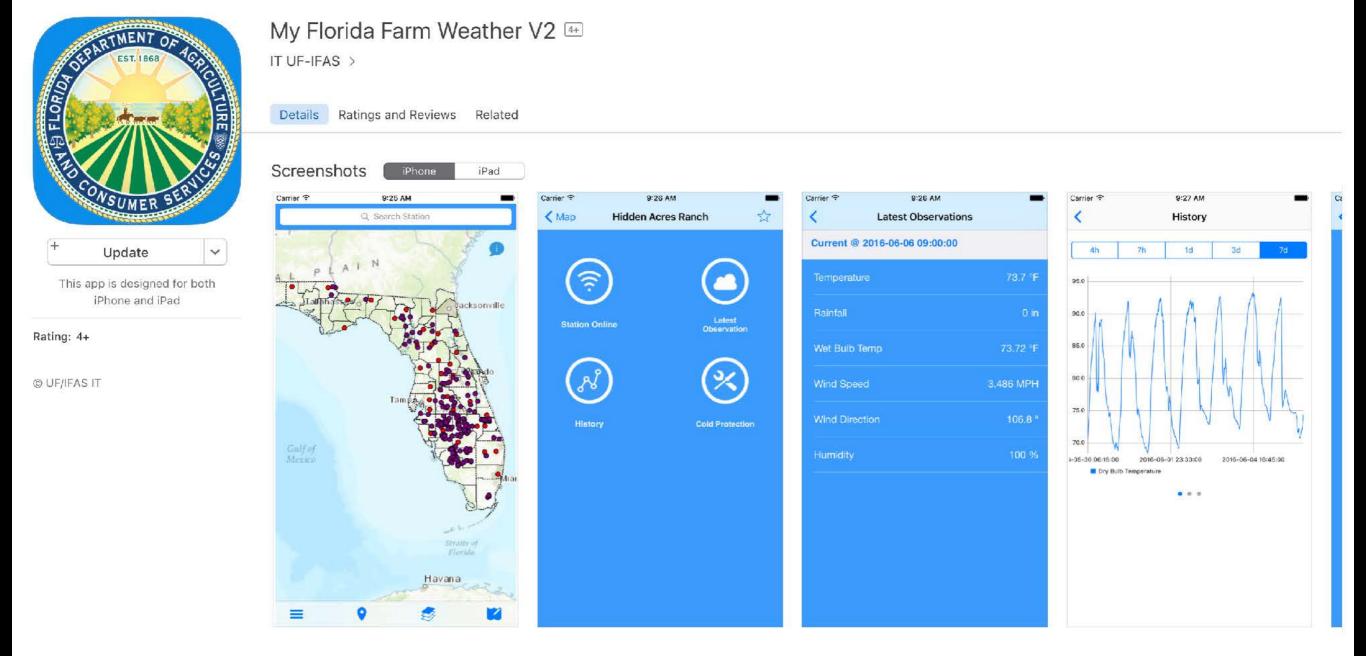


 Which days to water. First, check with your local water management district for watering restrictions; there may prescribed days of the week you can water. Water is lost to the atmosphere through evapotranspiration (ET). In the spring and summer, ET is greater, so your lawn will typically need water every 3-5 days during these months. In the fall and winter, however, ET is less, so your lawn will typically need water every 10-14 days during these months. In general, however, water only as needed – when about 30% of your grass shows wilt.

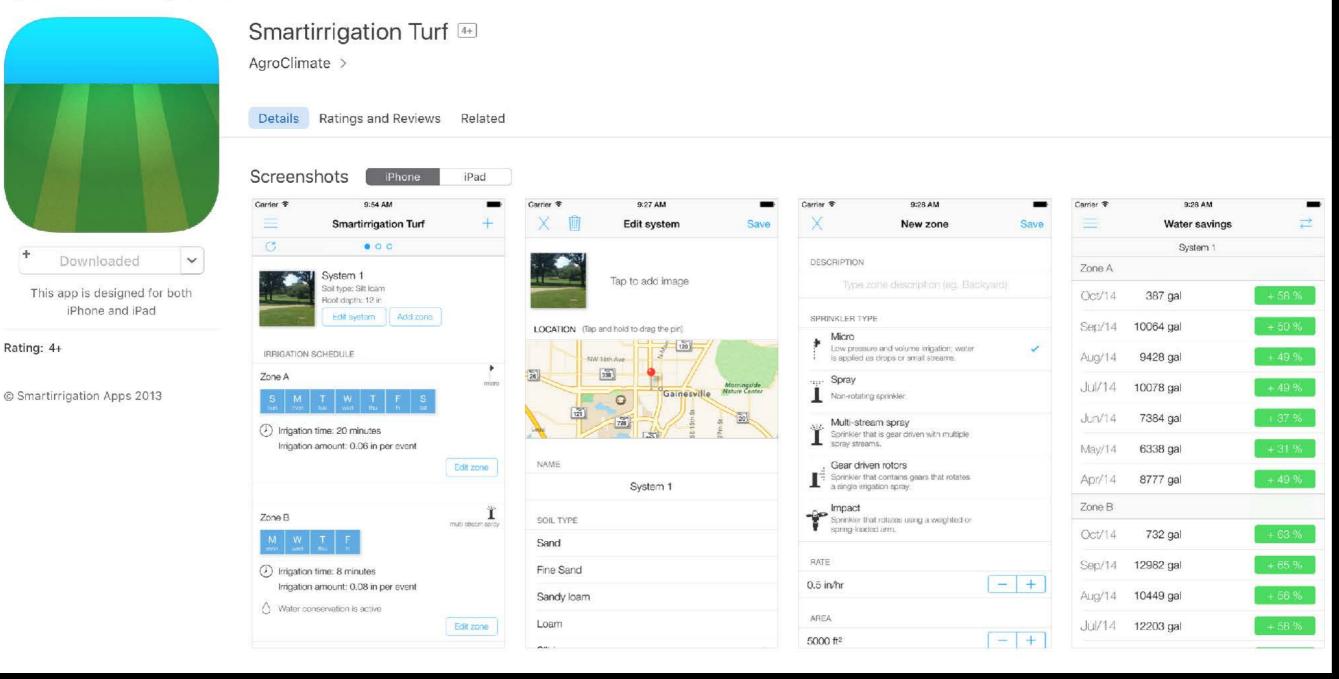
My Florida Farm Weather



On-site data Cold Protection Irrigation Scheduling App Store > Education > IT UF-IFAS



App Store > Weather > AgroClimate



Florida Automated Weather Network (FAWN) Benefits

All real time and historic Fawn Weather Information

- Free to the public.
- Available to Farmers, Citrus, Strawberry, Fern, Tropical Plants.
- Water Management Districts use the weather data for water conservation.
- Department of Forestry use data for fire control.
- UF Researchers use to find cures for Citrus Greening, Strawberry Diseases, and plant diseases.

Special Thanks!





VAGEME

fawn.ifas.ufl.edu myfawn.com



