http://agweather.mesonet.org/ · Volume 3, Issue 3, April 08

agweather connection

A new way to water lawns

A new tool is available to help homeowners know when and how long to water lawns in Oklahoma.

The Simple Irrigation Plan, or SIP for short, is available at http://sip.mesonet.org on the Internet. SIP uses the power of the Oklahoma Mesonet to calculate how long to run automatic or hose-end sprinklers.

The benefits of SIP include:

- Custom watering rates by grass type, sprinkler type and location
- Lawn watering recommendation in 5-10 seconds
- Reduce water waste
- Potential to save money

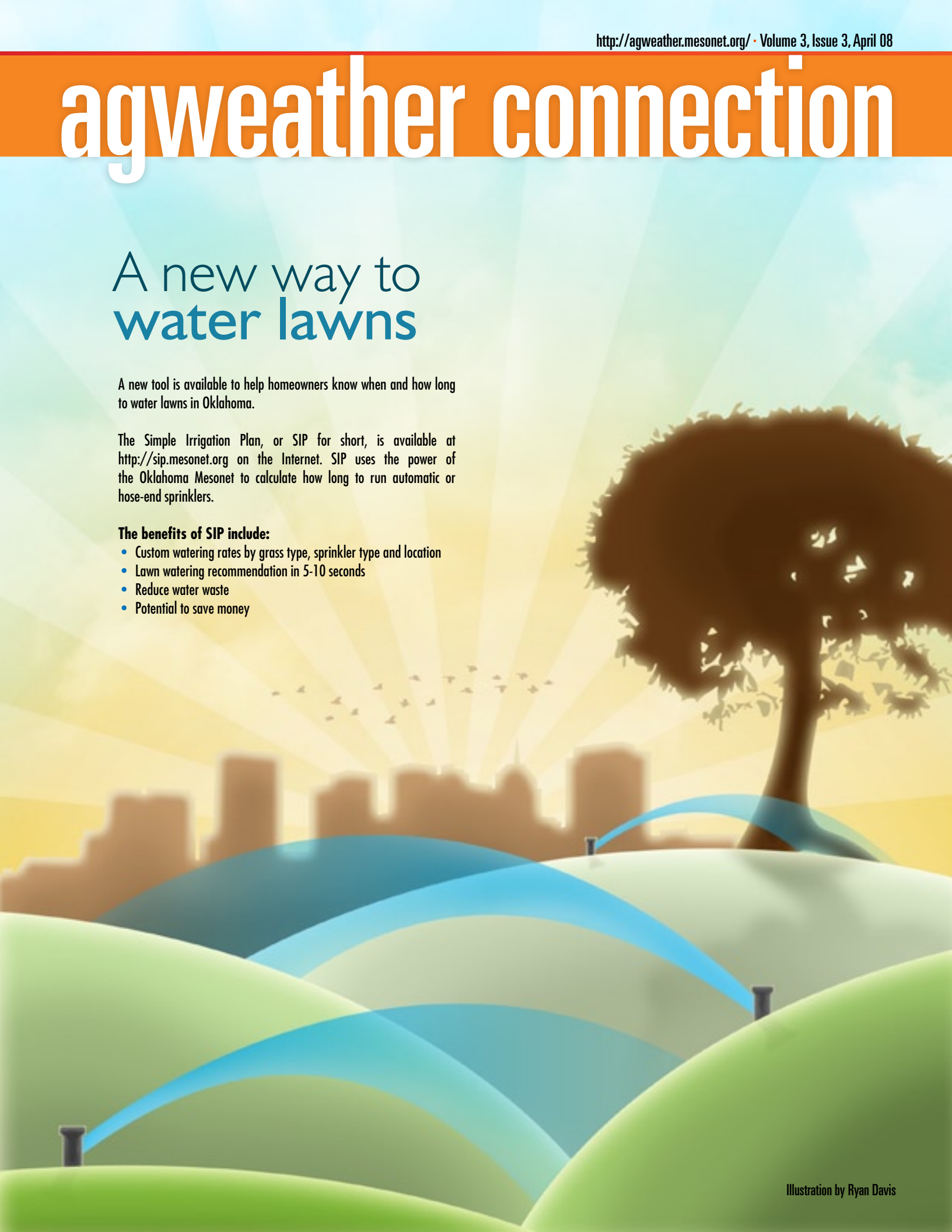


Illustration by Ryan Davis

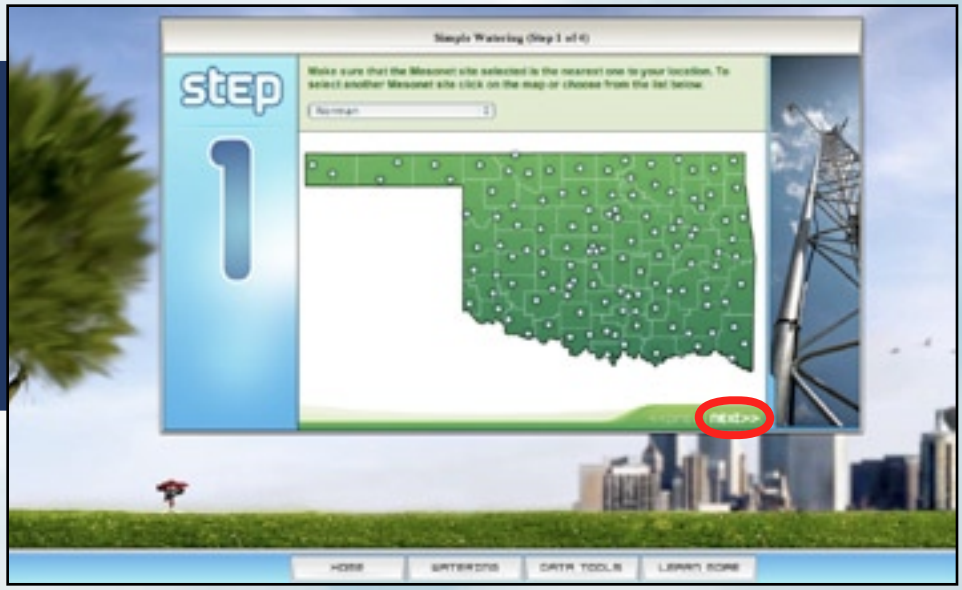
SIMPLE WATERING

Start here

- Go to http://sip.mesonet.org
- There are three choices in this program: Simple Watering, Advanced Watering and Advanced Watering Plus
- This tutorial will walk you through Simple Watering

Pick your location

- On the SIP home page, select "Simple Watering"
- Choose the Mesonet tower that's closest to you
- You can do this by selecting a white dot on the map or by using the drop-down menu located in the top center of the page
- Click "Next," which is located near the bottom right of the map



How thirsty is lawn?

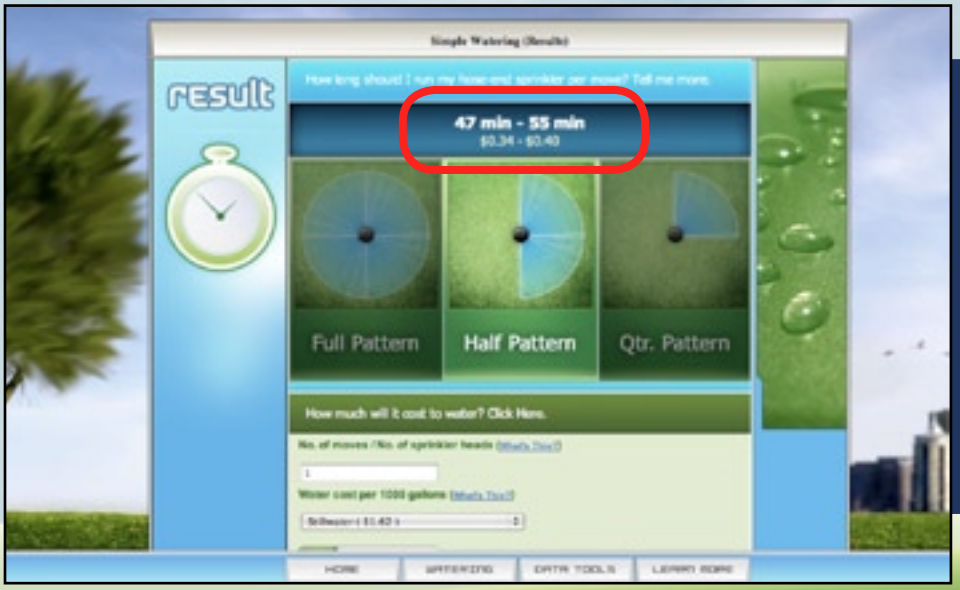
- Select the number of days since it either rained or you watered your lawn
- If you're not sure or it's been longer than 7 days, go ahead and select 7 days
- Then click "Next"

Select grass type

- Pick your grass type
- For more information on each grass type, select the "What's This?" button in the top center of the page
- Click the "Next" button

Choose sprinkler

- Click on the sprinkler that most closely matches the one you use
- Then click "Next"



Voila!

- If you select a hose-end sprinkler, click on the corresponding pattern depending on how your sprinklers run
- To find out the cost, click on the "How much will it cost to water?" button located in the center of the page
- Enter the number of times you have to move your sprinkler or the number of sprinkler heads you have
- Then select your town or find a town that has similar water prices and hit "Calculate"

send garden pests PACKING

By Dr. Eric Rebek

With the advent of spring comes the welcome return of color to our ornamental landscapes and lawns as plants awaken from winter dormancy. Keep in mind, however, that plants are not the only organisms tuned into warmer weather—insects and other arthropods also become active as spring approaches.

While most of these critters cause little to no harm and may even benefit us in some way, a few bad apples can certainly spoil the bunch. Some of these pests begin munching on our favorite landscape plants at bud break, so April is a good time to start keeping a vigil for these vile villains.

Be on the lookout for common landscape pests such as bagworms on cedars and other junipers, eastern tent caterpillars on crabapples and hawthorns, adult wood-boring beetles tunneling out of trees, and various aphids and scale insects (look for mite-sized "crawlers") on a wide variety of host plants.

One way to track pest emergence is through growing degree-day advisories, which can be found on Agweather. Growing degree-day advisories calculate the amount of heat accumulated above a minimum base temperature from a given start date. For insects, we commonly use a base temperature of 50°F.

Pest	Degree-day unit treament range
Aphids	7-120 and 135-250
Bagworm	600-900
Spider mite	363-618
Eastern tent caterpillar	90-190

The calculation works like this:
Degree-day units = Average daily temp. – Base temp.
For example, if the average daily temperature is equal to 54.5 °F, then the number of degree-day units that accumulated that day are 54.5 – 50 = 4.5 units.

This calculation is repeated every day over the growing season (negative results are given a value of zero), and daily results are added together to determine the accumulated amount of heat over time.

Insect development corresponds to an increasing number of accumulated degree-days, and different species begin showing up in the landscape at distinct ranges of degree-day units. Because some springs are cooler than others, degree-day models are much better than calendar dates at predicting the emergence of pests.

Refer to the table below for treatment times for common pests, in degree-day units. Click here to track degree-day units for your area. Use a start date of March 1. For more information about treatment, contact your local OSU extension office.

Dr. Eric Rebek is an assistant professor in the entomology and plant pathology department at OSU.