

**School & Home Integrated  
Pest Management (IPM)  
Newsletter – January/February  
2023**



THE UNIVERSITY OF ARIZONA  
**Agriculture, Life &  
Veterinary Sciences &  
Cooperative Extension**

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**We wish our readers a Happy New Year 2023!  
Please consider distributing this newsletter to others.**

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### **To Water or Not?**

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Figure 1: Central Arizona Project Canal in Phoenix, AZ in 2010.  
(Photo: User: Onel5969, Wikimedia Commons)

***Will the winter storms received over the end of 2022 and beginning of 2023 have an impact on Arizona's drought?***

According to University of Arizona climatologist Mike Crimmins, there is slight improvement in the short term, but long-term drought is still an issue. Arizona has been experiencing drought for decades. The most intense period of drought occurred the week of December 1, 2020, when 76.81% of Arizona land was affected ([www.drought.gov](http://www.drought.gov)).

The Arizona Drought Monitoring Technical Committee confers weekly to advise the U.S. Drought Monitor authors on the current drought conditions in Arizona, and makes recommendations about the position of the drought boundaries for Arizona. The U.S. Drought Monitor is the official record of drought for Federal drought relief claims. Every Thursday, the Drought Status web page automatically updates with the latest U.S. Drought Monitor map of Arizona ([Drought Status | Arizona Department of Water Resources \(azwater.gov\)](http://Drought Status | Arizona Department of Water Resources (azwater.gov))).

## Arizona's Water Saving Culture



Figure 2: View of a residential community in Arizona.  
(Photo: Pixabay.com)

The Arizona Department of Water Resources estimates that on average, each Arizona resident uses about 146 gallons per day. About 20 percent of the State's water supply is for municipal use, and most of this is residential. Up to 70 percent of that water is used outdoors (watering plants, swimming pools, washing cars, etc.) especially during the summer months, with the remaining used indoors (bathing, cooking, cleaning, etc.). Residents that incorporate water efficiency into everyday life help to preserve water for future generations. Learn about [Water Conservation Tips for Arizona Residents](#) and discover ways to contribute to Arizona's water-saving culture.

## How is Water Management related to IPM?

Pests are living entities and water is critical to their survival. Pests will exploit any source of water such as leaky faucets, condensate from air-conditioning, broken irrigation lines, pet bowls and bird baths, and many other sources.

IPM, or integrated pest management emphasizes exclusion of pests by not providing water and food sources to pests. Thus, water management is closely related to IPM. In gardens and landscapes, adequate and timely irrigation is critical to overall plant health, because improper irrigation makes plants stressed and vulnerable to pest attack.

## Landscape Watering Conservation Awareness

(Compiled by Donna Lorch, Master Gardener, Maricopa County Cooperative Extension).

**50% to 70% of water use is outdoors.** Because we live in a desert, we have a tendency to over water our landscape. Watering efficiently is one of the best and easiest ways to save thousands of gallons of water. Proper watering will also keep your landscape plants healthy and beautiful throughout the year. Compiled here are resources providing insight into what to plant, when to water, how often to water and how much to water.

**Arizona Department of Water Resources**, Conservation – Residential & Professional  
<https://new.azwater.gov/conservation/landscaping>

Addressed are:

- Lists of Low Water Use & Drought Tolerant Plants by regions in Arizona,
- Landscape Resources
- Irrigation and Water Harvesting
  - Irrigation
    - AMWUA's Landscape Watering by the Numbers
    - How often and How long to water
    - Guidelines for Landscape Drip Irrigation Systems
    - Desert Lawn Care Guide
    - Training and Certifications
  - Water Harvesting
    - Rainwater Harvesting
    - Gray Water Harvesting

**Arizona Municipal Water Users' Association, (AMWUA)** <https://www.amwua.org/>  
Addressed are:

***Landscape Watering for the Arizona Desert***

<https://www.amwua.org/landscape-and-garden/landscape-watering-for-the-arizona-desert>

***Plants for the AZ Desert***

<https://www.amwua.org/plants>

***Landscaping with Style in the AZ Desert***

<https://www.amwua.org/landscaping-with-style>

**Water - Use It Wisely (WUIW)** <https://wateruseitwisely.com/>

Addressed are:

- How to Xeriscape, <https://wateruseitwisely.com/saving-water-outdoors/how-to-xeriscape/>
- Low-Water Use Plants, <https://wateruseitwisely.com/saving-water-outdoors/how-to-xeriscape/low-water-use-plants/>
- Interactive Watering Guides
  - Landscape Watering by the Numbers Flipbook, <https://wateruseitwisely.com/?r3d=landscape-watering-guide-flipbook>
  - Interactive Plant Watering Guide, <https://wateruseitwisely.com/saving-water-outdoors/plant-watering-guide/>
  - Interactive Lawn Watering Guide, <https://wateruseitwisely.com/saving-water-outdoors/lawn-watering-guide/>
  - Landscape Ideas, <https://wateruseitwisely.com/saving-water-outdoors/our-top-landscape-ideas/>
- Grass & Artificial Turf, <https://wateruseitwisely.com/saving-water-outdoors/grass-artificial-turf/>
- Efficient Irrigation, <https://wateruseitwisely.com/saving-water-outdoors/efficient-irrigation/>
- Rainwater Harvesting, <https://wateruseitwisely.com/saving-water-outdoors/rainwater-harvesting/>
- Swimming Pools, <https://wateruseitwisely.com/saving-water-outdoors/swimming-pools/>

**City Resources**

City of Apache Junction, <https://www.ajwaterdistrict.org/conservation/water-conservation>

Town of Carefree Water Company,

<http://www.carefreewaterco.com/waterconservation.html>

Town of Cave Creek, <https://www.arizonawaterfacts.com/mtw/cave-creek>

City of Chandler, <https://www.chandleraz.gov/residents/water/water-conservation>

Town of Fountain Hills, <https://www.fountainhillsaz.gov/342/Water-Conservation>

Town of Gilbert, Watering your Yard, [Watering Your Yard | Town of Gilbert, Arizona \(gilbertaz.gov\)](http://www.gilbertaz.gov)

City of Glendale, [Water Conservation and Sustainable Living - City of Glendale \(glendaleaz.com\)](http://www.glendaleaz.com)  
City of Goodyear, <https://www.goodyearaz.gov/government/departments/public-works/water-conservation>  
Town of Marana, <https://www.maranaaz.gov/water-conservation>  
City of Mesa Water, <https://www.mesaaz.gov/residents/water/water-conservation>  
City of Peoria, <https://www.peoriaaz.gov/government/departments/water-services/sustainability-water-conservation>  
City of Phoenix, <https://www.phoenix.gov/waterservices/resourcesconservation>  
<https://www.phoenix.gov/waterservices/water-smart-blog/hoa>  
Town of Queen Creek,  
<https://www.queencreekaz.gov/departments/utilities/water/water-conservation>  
City of Safford, <http://cityofsafford.us/411/Water-Conservation>  
City of Scottsdale, <https://www.scottsdaleaz.gov/Water>  
City of Surprise, <https://www.surpriseaz.gov/275/Water-Conservation>  
City of Tempe, <https://www.tempe.gov/government/municipal-utilities/water/water-conservation>  
City of Tucson, <https://www.tucsonaz.gov/water/residential-and-commercial-conservation>  
<https://www.tucsonaz.gov/water/landscape>  
City of Yuma, <https://www.yumaaz.gov/government/utilities/water-conservation>

#### **University of Arizona resource publications**

AZ1298-2017, "Watering Trees and Shrubs, Simple Techniques for Efficient Landscape Watering"  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1298-2017.pdf>  
AZ1741-2017 "A Study of Irrigation Requirements of Southwestern Landscape Trees"  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1741-2017.pdf>  
AZ1497 "Water Wise Landscape Design in Five Easy Steps",  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1497.pdf>  
AZ1048 "Care of Desert Adapted Plants",  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1048.pdf>  
AZ1371 "Converting Turf to a Xeriscape Landscape",  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1371.pdf>  
AZ1458-2015, "Doing our Part to Help Conserve Arizona's Water Resources and Reduce Global Warming by Saving Energy at Home",  
<https://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1458-2015.pdf>  
AZ1392-2016 "Drip Irrigation: The Basics",  
[http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1392-2016\\_0.pdf](http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1392-2016_0.pdf)

AZ1681-2015 “Mowing Turfgrasses in the Desert”,  
<http://extension.arizona.edu/sites/extension.arizona.edu/files/pubs/az1681-2015.pdf>

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## We'll Take Your Ticks

**The Border Tick and *Rickettsia* Surveillance (BiTeRS) program of the Pacific Southwest Center of Excellence in Vector-Borne Diseases (PacVec)** offers services to

enhance surveillance for ticks and tick-borne pathogens of human health concern in California and Arizona. This is made possible through our project leaders at the University of California, Davis, and the University of Arizona, and collaborating local and state agencies, including the California Department of Public Health and the Arizona Department of Health Services.



**We help every step of the way, and identification and pathogen testing are FREE. Collection supplies and protocols are provided, and partners receive all results on ticks they have submitted.**

### We work with partner organizations to:

- Perform surveillance for ticks and tick-borne diseases in their area
- Learn about risks of tick-borne diseases in their area by testing ticks for pathogens/diseases
- Collect and submit ticks for identification and testing
- Rapidly report results of tick identification and pathogen testing to submitting partners
- Provide training on ticks and tick-borne disease

### Partner organizations may be:

- Government entities (local, tribal, county, or other)
- Workplaces with tick exposure
- Animal control, humane, or veterinary organizations
- Pest control services
- Other businesses or groups near the southern border with potential tick exposure

**Download the BiTeRS Flyer for distribution: <https://pacvec.us/biters/>**

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## What the Heck is This?



If you know the answer, email Dawn at [dhgouge@email.arizona.edu](mailto:dhgouge@email.arizona.edu). You will not win anything if you are correct, but you will be listed as a “Master Pest Detective” in the next newsletter issue.

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To view all our previous newsletters, visit: <https://acis.cals.arizona.edu/community-ipm/home-and-school-ipm-newsletters>.

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## Upcoming Events

### **What's Bugging You? First Friday Events (New York State IPM Program) Fridays | 12:00 pm. – 12:30 p.m. EDT | Zoom | Free; registration required**

The first Friday of each month, spend half an hour over lunch learning about practical solutions for pest problems with the New York State IPM Program. Each presentation will end with an IPM Minute.

<https://nysipm.cornell.edu/whats-bugging-you/first-friday-events/>

Upcoming First Friday Events:

- February 3, 2023: **Indoor cockroaches, pet flea/tick treatments**
  - March 3, 2023: **Carpenter ants, Carpenter bees**
  - April 7, 2023: **Avoiding wildlife at home; Slug/snail management**
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### **Urban and Community IPM Webinars**

**Host:** University of California

UC Statewide IPM Program Urban and Community webinar series is held the third Thursday of every month to teach about pest identification, prevention and management around the home and garden. This series is free but advanced registration is required.

Dates and topics below, all begin at noon Pacific. <https://ucanr.edu/sites/ucipm-community-webinars/>

Upcoming webinars:

- February 16: **Pantry Pests**
  - March 16: **Preventing Pest Problems at Seeding**
  - April 20: **Aphids, Scales and Mealybugs**
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### **EPA Webinars about Integrated Pest Management**

The EPA Center of Integrated Pest Management hosts a webinar series featuring national experts from across the country relaying educational and practical strategies for establishing and improving integrated pest management programs in buildings. We invite you to review the information on the past topics. Register for new or review archived IPM webinars <https://www.epa.gov/ipm/previous-webinars-about-integrated-pest-management>.

**Upcoming webinar:**

**Fungal Biopesticides: A Growing Option in Pest Control.** February 21, 2023.

Many people do not realize that certain fungi are now being used as pesticides to provide selective control of insect pests. These biopesticides are usually inherently less toxic than conventional pesticide and generally affect only the target pest and closely related organisms. This webinar will highlight some of these biopesticides, such as *Beauveria bassiana* and *Metarhizium*, and the novel ways in which they are



being used to manage important pests, including bed bugs and mosquitoes. Register at <https://register.gotowebinar.com/register/2831499054611375118>

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## **Save the Date: 6th Arizona School IPM Conference**

**In person on April 18<sup>th</sup> and 19<sup>th</sup>, and Online April 24<sup>th</sup> – May 31<sup>st</sup>, 2023.**

A great opportunity for continuing education not only for schools and childcare, but also for community colleges, city parks and rec, turf and landscape managers, golf course supervisors, and other institutional staff engaged in operations, maintenance, turf and landscape, food service, health services and many other areas. The **online format makes it accessible to persons anywhere in Arizona and other states**. Registration information and schedule coming soon. **Have a question?** Call 520-374-6299 or email [nairs@arizona.edu](mailto:nairs@arizona.edu).

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View recordings of previous EPA Integrated Pest Management Webinars at <https://www.epa.gov/managing-pests-schools/upcoming-integrated-pest-management-webinars>.

For more information about the EPA Schools program: <http://www.epa.gov/schools/>

To view all our previous newsletters, visit: <https://acis.cals.arizona.edu/community-ipm/home-and-school-ipm-newsletters>.

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## **Acknowledgements**

This material is in part funded by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number 2021-70006-35385 that provides Extension IPM funding to the University of Arizona. Additional support is provided by the UA Arizona Pest Management Center and Department of Entomology. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the U.S. Department of Agriculture or those of other funders.