

"Mapping, quantifying, and reporting new infestations early helps our biologists and other land managers to implement better strategies for prevention, control, and eradication"

Allen Rowley, Director of the Forest Management, Rangeland Management, and Vegetation Ecology Units for the Forest Service in Washington, D.C.

"The public accesses land more than we can possibly do and so if we can leverage that access and that use to help us track these invasive species we will be able to respond quicker and hopefully get a handle on them faster."

Chelsea Monks, Field Biologist at Siuslaw National Forest

### Overview

- <u>Goal:</u> to expand the capacity for National Forests and Grassland to Survey, Inventory, and Map of aquatic and terrestrial invasive species in high value areas using the support of citizen volunteers and other partners.
- Objective: using a piloted effort over 5 years, quantify the location and extent of all targeted populations of aquatic and terrestrial invasive species currently invading on each Research Natural Areas, Wilderness Areas, and along all Wild & Scenic River corridors within the National Forest System.
- <u>Scope:</u> Wilderness Areas, Wild & Scenic Rivers within prioritized piloted National Forests nationwide.
- <u>Approach:</u> utilize volunteer "citizen scientists" to work in a coordinated manner; capitalize on existing skillsets of private individuals, volunteer organizations, and partners to detect, measure and map invasive species in a safe and efficient manner.

# Wild Spotter Major Components

- 1. National Website
- 2. EDDMapS Platform
- 3. Marketing and Promotion
- 4. Volunteer Recruitment and Coordination

# Wild Spotter Components

### 1) National Website

- www.wildspotter.org
- Project Overview
- Identification Materials
- Survey, Inventory, and Mapping Protocols
- Customized Site Information
  - Access and Contact Information
  - Maps
  - Invasive Species List



### **Monongahela National Forest**

This Forest offers a wide range of recreational activities due to eight Wilderness Areas, a National Scenic Byway, and the Spruce Knob-Seneca Rocks National Recreation Area.











### www.wildspotter.org

Become a Wild Spotter Partner



Where To Look

What To Look For

Places





### Wild Spotter Mission

Wild Spotter aims to build citizen science volunteer capacity to protect America's wild places from harmful invasive plants, vertebrates, invertebrates, microbes, algae, and fungi that outcompete our nation's native species and threaten the biodiversity and health of every aquatic and terrestrial ecosystem.



### **Promote Awareness**

America's wild places are home to beauty, diversity, and reflection, yet they are under attack from aquatic and terrestrial invasive species. One of the goals of Wild Spotter is to help raise public awareness about the threat of these non-native invaders, and provide fast and simple steps the public can take to prevent them from spreading into new areas.



### Engage the Public

Wild Spotter helps you identify, map, and report invasive species found in your favorite wild places. The data you collect will help create the first-ever nationwide inventory of invasive species in America's natural areas. You can help us fight back against harmful invaders by becoming a Wild Spotter volunteer or partner. By downloading the FREE Wild Spotter Mobile App on your smartphone, you can quickly and easily collect vital data on these invasions: location, extent, and impact - all while you are enjoying the great outdoors.



### Defeat Invasives

The data you collect while you are visiting America's wild places will help management teams create more effective strategies to prevent and control invasive species and restore the areas they impact. By reporting data through the FREE Wild Spotter Mobile App, you will be helping to protect recreational activities, such as hiking, camping, fishing, hunting, climbing as well as clean water, abundant wildlife, and all the other benefits of these wonderful wild places.

### www.wildspotter.org

# Opportunities to Join Wild Spotter

### Become a Wild Spotter

Volunteers are a vital part of the Wild Spotter campaign! To become a volunteer, register either online or download the FREE Wild Spotter Mobile App on your smartphone or other mobile device. Once registered, reach out to your nearest National Forest or Grassland to discover how you can volunteer to help support and protect these beautiful places from invasive species. Then, just get outside and enjoy America's wild places while keeping an eye out for those harmful invaders!

### Become a Partner

Wild Spotter networks people and organizations to help manage invasive species through on-the-ground, community-based projects, partnerships, and volunteer citizen science support that increases capacity for conserving our nation's natural resources. Wild Spotter creates partnerships with public and private organizations at all levels and across all landownerships. Complete the FREE Registration form to become a Wild Spotter Partner now!

# Wild Spotter – The Steps



Join

the Network of Citizen Scientists



Download

the Free Mobile App



Identify

the Invasive Plants, Pathogens and Animals



Map

Locations of Invasive Species in Your Favorite Wild Places



Protect

America's Wild Places for Future Generations

### Join - Website

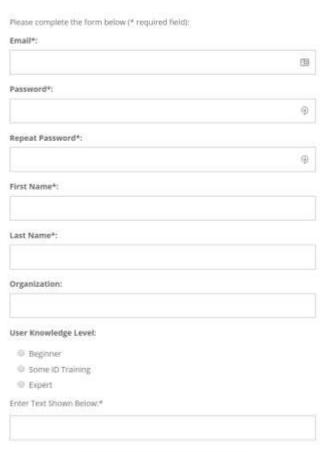
- Registration via website
  - Can register through the Wild Spotter App (iOS and Android)
  - Can login with existing EDDMapS account
- After registering/logging into, you will be prompted to select the Place you will be visiting and reporting in





Wild Spotter Volunteer Registration Form

What To Look For



Help Find and Map Invasive Species

Volunteers are a vital part of the Wild Spotter campaign! To become a Wild Spotter volunteer, register either online or download the Wild Spotter Mobile App on your smartphone or other mobile device. Once registered, reach out to your nearest National Forest or National Grassland to discover how you can volunteer to help support and protect these beautiful places from invasive species. Then, just get outside and enjoy America's wild places while keeping an eye out for those harmful invaders)

Connect with a Forest Ranger for more information about the Wild Spotter activities at your favorite National Forest or National Grassland and sign-up before you go out. into the great outdoors! For general information on volunteering with the USDA Forest Service, visit the following websites:

USFS Volunteer Program Citizen Science Program



# Pathways

- Locations where invasive species are likely to find a foothold
- Provides info on how the invasive species get in these locations
  - Mechanisms of spread by species (hooks/"Velcro" on seeds, fruit attractive to animals, etc.)
  - Vectors (Unclean equipment, moved firewood, deliberate planting/release, etc.)
- Provides tips on how to prevent becoming a vector



/olunteer

Where To Look

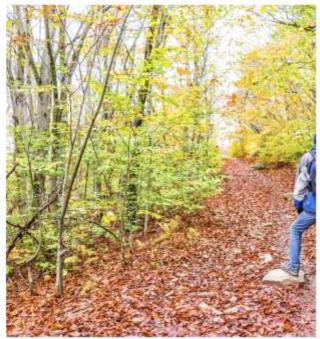
What To Look

Par

s Pr

### Where to Look

environment itself, water, moves organisms



### Trails/Trailheads

Invasive species, particularly plants, take advantage of the site disturbances at trailheads and along trails. Heavy use of these areas by hikers, horseback riders, and other visitors increases the likelihood that invasive species will become established and spread. These areas are prime locations to look for new invasions. In areas where two or more trails cross, or a trail crosses a roadway, the chance of finding an invasive species infestation is even greater.

Invasive species can spread by seeds, spores, wegetative material, eggs, and other means. Each of these can be accidentally picked-up and hitch a ride on clothes, shoes, gear, or animals, allowing the invasive species to be dispersed as the visitor or animal walks along the trails. Material like seeds, tiny insect eggs, or spores can easily become trapped in the treads of hiking footwear. Some plants have tiny hooks which help them attach to fabric or fur for transportation to other areas, insects and spores can also travel this way.



# Species ID

- Name
- Reporting Stats
- Images of Characteristics
- Text
- Listed by Forests/Places



Where To Look Volunteer

What To Look For

Places Partners Prevention

Support

### Amur honeysuckle - Lonicera maackii

O People Contributing O Observation(s) O place(s)



















### Appearance

Lonicera maackii is a woody perennial shrub that can grow up to 16,5 ft. (5 m) in height.

The oppositely arranged leaves are ovate to lance-ovate in shape and measure 1.3-3.3 in. (3,5-8.5 cm) long. The tips of the leaves are acuminate. The leaves are dark green above and lighter on the lower surface. The veins of the leaves are pubescent.

#### Flowers

The white flowers are found in erect pairs that are on peduncles shorter than the petioles. The flowers measure 0.6-0.75 in. (1,5-2 cm) long and are bilabiate. The flowers appear on the plant from late May to early June, which is later than the other honeysuckles.

#### Fruit

The fruit are dark red in color, spherical in shape and measure 0.25 in. (6 mm) in diameter. The fruit become ripe on the plant in the late fall.

### **Ecological Threat**

Lonicera maackii can form large stands that prevent native shrubs and herbaceous understory plants from growing. The fruits persist on the branches into the winter, when birds feed on them. In the spring, Lonicera maackii is one of the first plants to leaf out, giving it a competitive advantage. This shrub can bear fruit when it is as young as 3 to 5 years old. Though Lonicera maackii has not yet become a major problem in New England, it is very troublesome in the southern and midwestern parts of the country.

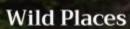
### Places monitoring this species

Daniel Boone National Forest Monongahela National Forest Shawnee National Forest

### Forests and More

- Currently launched at 12 pilot forests across the US
- Places have descriptions with information about specific locations within each site
- More Forests, Wild & Scenic Rivers, Wilderness Areas, and other types of locations will be added







### Bridger-Teton National Forest

Welcome to the Bridger-Teton National Forestl Adjacent to both the Grand-Teton National Park and the National Elk Refuge, the Bridger-Teton National Forest comprises 3.4 million acres. The Forest has three wilderness areas, which include the Bridger Wilderness, the Gros Ventre Wilderness, and the Teton Wilderness, that offer visitors the chance to view diverse wildlife. During the summer months, visitors are likely to see trumpeter swans, sandhili cranes, coyotes, bald eagles, and elk. Species easier to see in winter, as they move to lower elevations, include moose, mule deer, and bighorn sheep. Although widely known for its large mammals, including grizzly bears, Bridger-Teton also supports over 355 species of birds. The Forest offers crystal clear waters, with unique geology and numerous recreation activities, at Snake River Carryon and Periodic Springs. Two Scenic Byways, the Wyoming Centennial Scenic Byway and the Big Springs Scenic Backway, hosts beautiful mountain views and wide river valleys. Winter activities are boundless at the Bridger-Teton National Forest with visitors able to enjoy snowmobiling, skiing, and mushing,



### Chequamegon-Nicolet National Forest

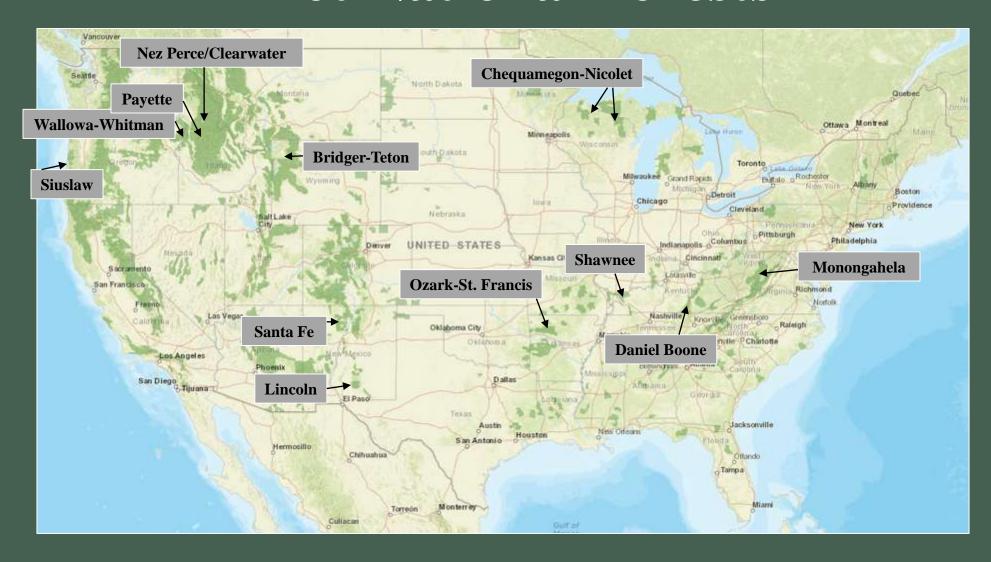
Welcome to the Chequamegon-Nicolet National Forest! The Chequamegon-Nicolet National Forest covers more than 1.5 million acres of Wisconsin's Northwoods. The Forest is managed for multiple uses including forestry, wildlife habitat, outdoor recreation, fisheries, species forest products gathering, wilderness, and natural areas. Two wilderness areas, the Blackjack Springs and Headwaters Wilderness, feature diverse vegetation typical of the Lake Superior Highlands and some of the largest and oldest trees in the Forest. Fishing, hunting, hiking, bird-watching, and canoeing are popular recreational activities on the wilderness areas. The St. Peter's Dome Trail provides visitors with an excellent view of the Chequamegon Bay of Lake Superior and the Apostle Islands while the Morgan Falls Trail highlights the 70-foot-high Morgan Falls. In winter, visitors can ski on one of the oldest and more popular cross-country ski trails in the Eagle River Area: Anvil National Recreation Trail, With more than 1.5 million acres of water and woodlands. The Chequamegon-Nicolet National Forest provides recreation opportunities for year-found motorized trail riding, water and land-based silent sports and the solitude of rustic quiet campgrounds.



#### Daniel Boone National Forest

Welcome to the Daniel Boone National Forest! The Daniel Boone National Forest features four ranger districts intermingled with private and state land across 21 counties in eastern Kentucky. Originally named the Cumberland National Forest, it was renamed in 1966 as the Daniel Boone National Forest in recognition of the adventurous frontiersman that explored much of this Kentucky region. With natural stone aches, waterfalls, cliff lines, rivers, creeks, and other places of unique natural beauty and historical significance visitors have numerous recreational activities to choose from. Hike to Grays Arch, measuring 50 feet high and 80 feet long, in the Cumberland Ranger District or explore the forest on the winding Red River Gorge National Scenic Byway. More than 850 wetlands on the Daniel Boone National Forest provide habitat for hundreds of plants and animals for visitors to view. Additionally, the Forest offers visitors a chance to view historical sites including the Clear Creek Iron Furnace, Camp

### **Pilot National Forests**





### 1) Priority Areas

- Wilderness Areas
  - Blackjack Springs
  - Headwaters
  - Porcupine Lake
  - Rainbow Lake
  - Whisker Lake
- Wild & Scenic Rivers
  - St. Croix National Scenic River

### 2) Invasive Species List

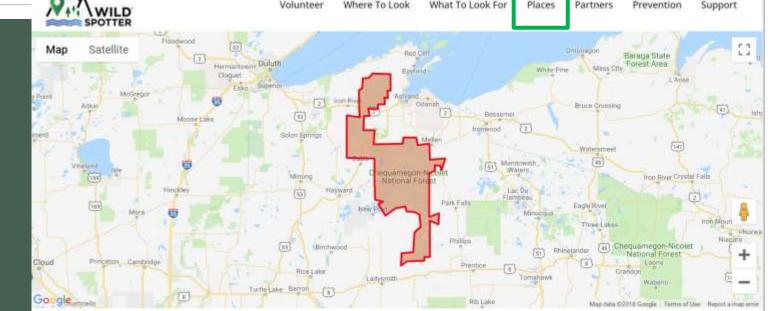
Someten	engopounius poungrurus	111227	
gartic mustard	Alliaria petiolata		
Japanese barberry	Berberis thunbergii		
Siberian peashrub	Caragana arborescens		
Oriental bitters west	Celastrus orbiculatus		
knapweeds	Centaurea spp.		
Canada thistle	Costum prvense		
marsh thirtle	Circium paluatre		
bull thistle	Circium vulgare		
Crown vetch	Coronilla varia		
Autumn stive	Eldeagnus umbellata		
leafy sporge	Euphorbia scula		
Glossy buckthom	Frangula alma (Rhamma frangula)		
bettle stem hemp nettle	Galeopus setrahit	26652	
dame's rocket	Hesperis matronalis		
pale yellow ms	Irts pseudoacorus		
morrow's honeysuckle	Lantcera morrowti	3541	
tatarian honeysucide	Lonicera tatarica	3043	
Bell's honeysuckle	Lonicera x bella	5948	
purple loosestrife	Lythrum sultcarta	3047	
field forget-me-not	Myosotic arvensis	32755	
true forget me not	Myosotte scorptoides	6071	
wild parsnip	Pastinaca sativa		
common reed	Phragmites australis ssp. Australis		
Japanese knotweed	Polygonum cuspidatum (Fallopia japonica)	19655	
cosmon buckthorn	Rhammus cathartica	3070	
black locust	Robinta punudoacaria	3350	
orange hawkweed	Hieractum aurantiacum	4423	
yellow hankweed	Hieraction caespitosum	4424	
St. johnswort	Hypericum perfoliatum	7151	
Dalmatian toadflax	Linaria dalmatica	5939	
yellow toadflax	Linaria vulgaria	3800	
white sweet clover	Melilotus albut	3050	
yellow sweet clover	Meltlotus officinalis	6008	
Eurasian watermiffod	Myrtophyllum spicatum	3055	
reed canary grass	Phalarii arundinacea	6170	
burnet saufrage	Pimpinella saufrage	18762	
curly pondweed	Potamogeton crispus	6219	

### 3) Pathways and Vectors

- Morgan Falls St. Peter's Dome Trail
- Anvil National Recreation Trail
- Mountain Fire Lookout Station
- Natural History Auto Tour
- Lakewood Auto Tour
- Franklin Lake Campground
- Lake Three Campground

### Place Info

- Map of the Property boundary
- Wild Place Name
- Tag Line
- Contribution Stats
- Photo and Description
- Link to the Place's website



### Chequamegon-Nicolet National Forest

Come hike the popular St. Peter's Dome Trail to see an excellent view of the Chequamegon Bay on Lake Superior!

O People Contributing O Observations



Photo credit: Forest Service

Welcome to the Chequamegon-Nicolet National Foresti The Chequamegon-Nicolet National Forest covers more than 1.5 million acres of Wisconsin's Northwoods. The Forest is managed for multiple uses including forestry, wildlife habitat, outdoor recreation, fisheries, species forest products gathering, wilderness, and natural areas. Two wilderness areas, the Blackjack Springs and Headwaters Wilderness, feature diverse vegetation typical of the Lake Superior Highlands and some of the largest and oldest trees in the Forest. Fishing, hunting, hiking, bird-watching, and canoeing are popular recreational activities on the wilderness areas. The St. Peter's Dome Trail provides visitors with an excellent view of the Chequamegon Bay of Lake Superior and the Apostle Islands while the Morgan Falls Trail highlights the 70-foothigh Morgan Falls. In winter, visitors can ski on one of the oldest and more popular cross-country ski trails in the Eagle River Area: Anvil National Recreation Trail. With more than 1.5 million acres of water and woodlands, the Chequamegon-Nicolet. National Forest provides recreation opportunities for year-found motorized trail riding, water and land-based silent sports and the solitude of rustic quiet campgrounds.

#### https://www.fs.usda.gov/cnnf

### Place Info

- Areas within the Place (Links to their websites)
- List of species of concern selected by the Place
  - Species are clickable and link to the Species Info

#### Wilderness Areas/Wild & Scenic Rivers

Blackjack Springs Wilderness - Blackjack Springs Wilderness' main feature is a series of 4 large, crystal clear springs that form the headwaters of Blackjack Creek,

Headwaters Wilderness - Popular recreation uses in Headwaters Wilderness are hiking, bird-watching, hunting, fishing, and studying nature.

Porcupine Lake Wilderness - Some of the Porcupine Lake Wilderness contains rolling hills covered with oak, maple, hemlock, and while pine while the remainder of the area is fairly flat.

Rainbow Lake Wilderness - A unique feature of Rainbow Lake Wilderness are the numerous narrow-gauge railroad grades that were used for log hauling in the early 1900's.

Whisker Lake Wilderness - Whisker Lake Wilderness got its name from the large pines near the shoreline of Whisker Lake.

St. Croix River - St. Croix River offers outdoor enthusiasts a chance to enjoy a wilderness-like experience and a variety of outdoor recreation opportunities within easy reach of a major metropolitan area.

### Invasive Species

Showing 1 to 14 of 42 entries









Search:

Subject Name	11.	Scientific Name	- 41	
autumn olive		Elaeagnus umbellata		i
black locust		Robinia pseudoacacia		
bull thistle		Cirsium vulgare		
burnet-saxifrage		Pimpinella saxifraga		
Canada thistle		Cirsium arvense		H
common hempnettle		Galeopsis tetrahit		
common mullein		Verbascum thapsus		
common reed		Phragmites australis		
common St. Johnswort		Hypericum perforatum		
common tansy		Tanacetum vulgare		
common valerian		Valeriana officinalis		
curly-leaved pondweed		Potamogeton crispus		
Dalmatian toadflax		Linaria dalmatica		

### Partners

- Lists the organizations, programs, groups, etc. that have joined Wild Spotter as partners
- Partners can provide a description of their organization, their goals, their history, and other information, including their role in natural resource and/or invasive species management



Volunteer V

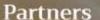
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The University of Georgia's Center for invasive Species and Ecosystem Health integrates information technology applications and graphic design tools with scientific based resources to provide a wide array of services. Their mission is to develop, consolidate, and disseminate information and programs focused on invasive species, forest health, natural resource and agricultural management through technology development, program implementation, training, applied research and public awareness at state, regional, national, and international levels.

https://www.bugwood.org/

#### Wildlife Forever

Wildlife Forever is a nonprofit conservation charity that has funded conservation works in all 50 states and Canada with more than 1,500 projects throughout North America. The mission of Wildlife Forever is to conserve America's wildlife heritage through conservation education, preservation of habitat and management of fish and wildlife. Wildlife Forever projects target research, management, land acquisition, and educational purposes. Special emphasis is placed upon grassroots programs.

https://www.wildlifeforever.org

#### USDA Forest Service

The Forest Service is a multi-faceted agency that includes researchers, land managers, fire-fighters, and a wide range of educational and financial assistance programs. The agency manages over 193 million acres of National Forests and Grasslands from Alaska to Puerto Rico, including nearly 35 million acres of designated Wilderness Areas and over 5,000 miles of designated Wild & Scenic flivers within the National Forest System. The mission of the agency is "To sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations." In partnership with others, the Forest Service provides leadership and support in the detection, prevention, and control of invasive species to protect and restore America's forest, rangeland, and aquatic ecosystems. Through multiple partnerships the agency ensures sustainable ecosystems by restoring and maintaining species diversity and ecological productivity that helps provide recreation, water, timber, minerals, fish, wildlife, wilderness, and aesthetic values for current and future generations of people.

https://www.fs.fed.us

#### Wild & Scenic Rivers

The National Wild and Scenic Rivers System was created in 1968 by Congress with the aim to preserve rivers with



- How invasive species move spread
- Specific tips based on activity or location
  - Trails
  - Fishing/boating
  - Camping
- Pets and other animals
  - Cleaning the animal and related equipment before and after recreating (e.g., trailers, feed, bedding, toys, etc.)



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Prevention

Support

Prevention

### Pathway/Vector

The means and routes by which invasive species are moved or introduced into new environments are called pathways, or vectors. Each invasive species may use a variety of pathways or vectors to spread. Be vigilant and proactive about invasive species to help prevent accidental spread of invasive species via pathways/vectors into new areas.

### Common Pathways and Vectors for invasion include:

Roads and Trails

Parking Areas and Trailheads

Facilities and other access areas for human activity (land or water)

Campsites, picnic sites

Historic sites (homes, forts, etc.)

Livestock use/staging/resting areas (corrals, highline sites, loading areas, resting/feeding areas, etc.)

Natural features of special interest (frequently used vistas/overlooks, waterfall viewing sites, etc.)

Vehicles, boats, and trailers

Equipment and gear

Clothing and shoes/boots

Tents, hammocks, and campers

Water, mud, soil, wood, and other natural materials

Pets and other animals

### How You Can Help

It is as simple as "Never move soil or debris from one area to another". For example, clean your clothes, footwear and equipment before entering a river. Then as you leave the water, clean your belongings of any soil or debris picked up while you were in the water. The same principle applies to any activities in natural areas, regardless of whether you are engaged in fishing, hiking, hunting, camping or one of the other wonderful activities possible in natural areas. Chief Seattle said it so well, "Take nothing but memories, leave nothing but footprints!"



# Support

- Frequently Asked Questions
  - Wild Spotter roles
    - Wild Spotter
    - Partner
  - Common questions about invasive species
- Videos
- More information and resources to be added as materials are developed





### **General Questions**

- Q. What is Wild Spotter?
- Q. Who is behind Wild Spotter?
- Q. How do I contact Wild Spotter?
- Q. How do I become a Wild Spotter Volunteer?
- Q. How do I become a Wild Spotter partner?

### Invasive Species

- Q. What is an invasive species?
- Q. Why should I care about invasive species?
- Q. How do I identify an invasive species?
- Q. Where do I look for invasive species?
- Q. How do invasive species get here?
- Q. How do I prevent the spread of invasives?

### Reporting

# Front Page Cont.

WILD SPOTTER

VOUNTEERS are what power Wild Spotter. These are an example of volunteers who go out and map invasives in America's wild places!

LATEST WILD SPOTTER NEWS AND EVENTS

Upcoming Events

more events —

Useful Links

- Volunteer spotlights
- News and Events
- Recent Reports
- Useful Links
- EDDMap\$

Recent Reports

EDD MapS

Early Detection & Distribution Mapping System

### Powered By EDDMapS

EDDMapS is a web-based mapping system for documenting invasive species distribution and there are immense numbers of invasive species observations reported each year. In turn, EDDMapS shares this data and makes it freely available to everyone. Wild Spotter is built upon the existing EDDMapS infrastructure and all data contributed becomes part of the overall database.



Wild Spotter Citizen Science Volunteers Needed

Help map invasive species threatening Wilderness Areas and Wild & Scenic Rivers.

Become a Wild Spotter

# Wild Spotter Direct Support Contact Information

mappinginvasives@gmail.com



# Wild Spotter Components

### 2) EDDMapS Platform

- Uniquely designed for project
- Same branding and design as National Website
- Supporting information for use by volunteers in the field
- Smartphone Apps for Data Collection (iPhone and Android devices)

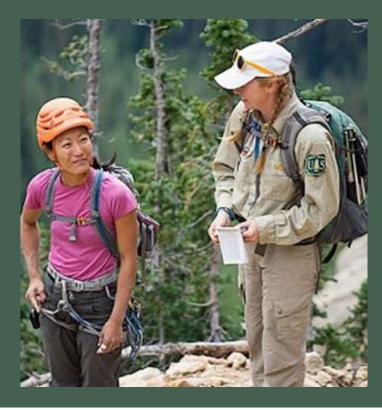












# EDDMapS (www.eddmaps.org)

- Electronic Early Detection Tool
- Aggregate database for individual reports, through websites and mobile apps, as well as existing bulk data from agencies and other databases
- Use the collected data to help programs Identify Existing Range, Gaps, and Leading Edge in Maps
- Provide tools for Early Detection, Verification, Alerts, Visualizations, Monitoring and Management, and Data Sharing and Collaboration
- Tools for land managers, invasive species program coordinators, etc.



# Wild Spotter Mobile Apps



Works on iPhone, iPad, and Android devices

Download and install the FREE Wild Spotter App to map invasive species in your favorite Wild Place





Mapping Invasives in America's Wild Places

Pick the Wild Place you are in or visiting\*

Select your Wild Place

Forest

Forest

**Daniel Boone National** 

Distance: 416.4 miles Shawnee National

Distance: 515.6 miles

Distance: 531.0 miles Ozark-St. Francis **National Forest** Distance: 639.4 miles

Monongahela National

Chequamegon-Nicolet National Forest

Lincoln National Forest

Distance: 1293.6 miles

\*Selecting a Wild Place will download the species list and ID info for that Place

Swipe through introductory slides to learn how to use the app!

# Wild Spotter App

omepage

Click on the dropdown box for more options

Explore and
Identify Any
Invasive Species
of Concern

View maps of your selected Wild Place







Species ID







Locate

About

Chequamegon-Nicolet National Forest Report your invasive species sightings (what, where, how much)

Learn about the Wild Place you are exploring Wild Place Name

## Learn About the Wild Place

Select the dropdown box to go to a different page



Welcome to the Lincoln National Forest! The 1.1 million acre Lincoln National Forest consists of three ranger districts: Sacramento, Smokey Bear, and Guadalupe with elevation ranging from 4,000 to 11,500 feet. There are three major mountain ranges within the Forest covering parts of four different counties in southeastern New Mexico. Five different life zones, ranging from Chihuahuan desert to sub-alpine forest, establish diverse vegetation types across the Lincoln National Forest. Vegetation types are comprised of targe cart in the lower elevations to Englement space.

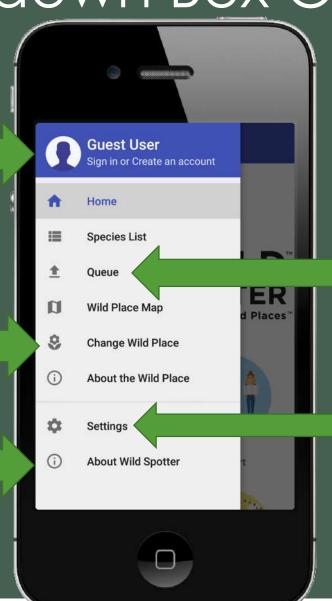
- Maps
- Descriptions
- Access
   Information
- Warnings
- Contacts
- Etc.

Tap link to learn more about the Wild Place Dropdown Box Options

Select to sign in or create a Wild Spotter account

Change your Home Wild Place when you travel

Purpose, goals, partners, etc. about Wild Spotter

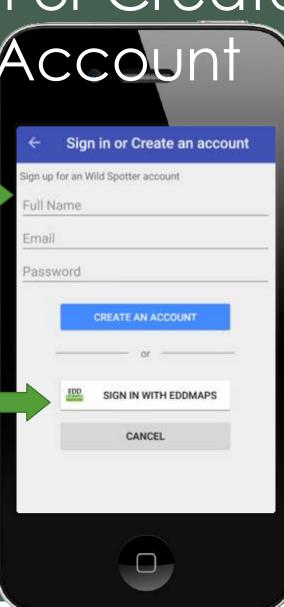


Tap Queue to upload your invasive species sightings

In-App settings for photo saving and version number

Sign in or Create an

Create an account or sign in with an existing EDDMapS Account



# Species Identification

Scroll
through
invasive
species by
category

Tap to learn more about each species



Dalmatian toadflax REPORT Dalmatian toadflax Linaria dalmatica Linaria dalmatica is a short-lived perennial herb that can grow 3.9 ft. (1.2 m) tall. The overall form of the plant is narrow and upright, with multiple stems growing from a single

Tap REPORT if you've spotted this species!

View pictures, descriptions, and identifying characteristics

# Reporting

The invasive species you've selected to Report

Location - Based on device's GPS, editable by tapping on the Map Icon
How large is the infestation?
(currently being modified)
Save your Report to the Upload



Current Date/Time (ectable)

Tap the camera to add photos to the report; important for verification!

How long did you spend surveying? (Great for volunteer programs!)
Additional comments relevant to the observation

# Data Collection and Mapping

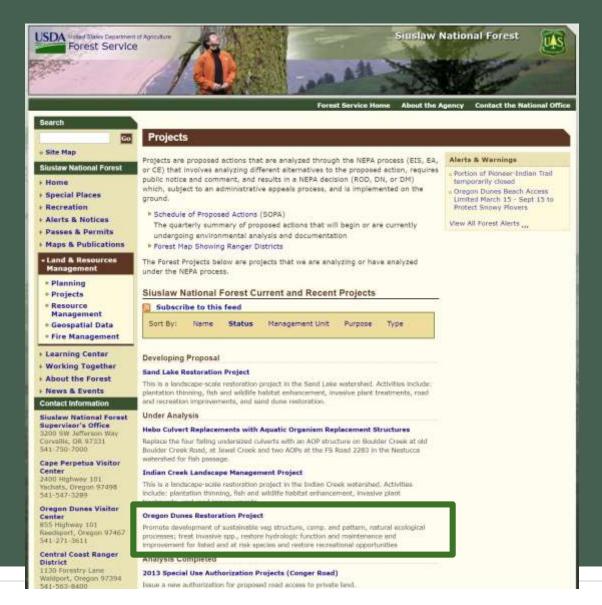
- Mobile apps are the primary way to collect data, although other manual methods are possible.
- We are working to provide guidance and support for taking environmental samples (e.g., eDNA).
- NRM is helping to move data from the Wild Spotter system into the USFS FACTS (TESP-IS) database.

### After Submission - Verification

- Validation and quality control through EDDMapS platform. Preloading USFS data into the system to reduce duplicating existing records.
- Verifiers have been recruited at each of the pilot forests
  - Directly ties the verifiers to the recreationalists reporting in their Wild Places
  - Verifiers will also be able to implement appropriate management procedures for positive identifications
  - Results from reports can help direct education efforts
    - Incorrect identifications More ID tools for those species
    - Locations of high reports Interpretive signage or materials



### After the data is verified...



# Oregon Dunes Restoration Project (Scoping Letter)

- Invasives are prominently mentioned in the needs:
  - "Promote the development of a sustainable vegetative structure, composition, and pattern to allow for natural processes to function and provide resilience against <u>invasive</u> species and uncharacteristic succession in the long term"
- Half of the proposed actions address methods to treat invasive species and the goal that invasive removal would achieve; greater sand movement and removal of specific invasive species and invasive species in general

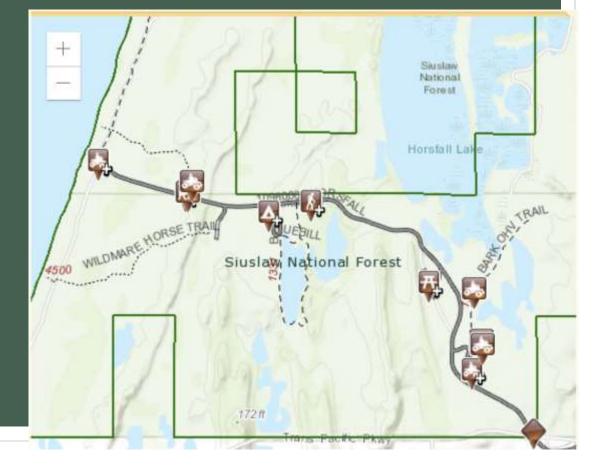


### How can Wild Spotters contribute to the ODRP?

Hiking Trails!



Horse Trails, OHV Trails, Camping, and more!



# How can Wild Spotters contribute to the ODRP?

- Many different recreationalists using different areas of the land
- "Autopilot" not as much of a concern with Wild Spotters as employees who drive the trails often
- Areas may see more recreationalists than employees, especially along invasive species pathways
- Promoting Wild Spotter can increase invasive species awareness and encourage better prevention practices (e.g., cleaning equipment, not entering infested areas, etc.)
- More data is needed to help the scientists analyze the impact of invasives, provide justification for control efforts, and evaluate effect of treatments over time.

## Wild Spotter Components

### 3) Marketing and Promotion

- Media (video, social, print, radio, web, television, etc.)
- Presentations (conferences/tradeshow)
- Networking and emailing list

 Targeted Marketing to diverse groups

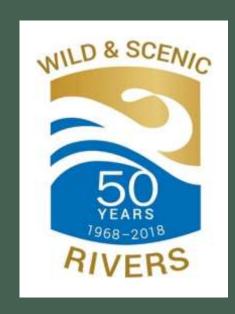






## Marketing and Promotion









www.WildSpotter.org



Wild Spotter engages and empowers the public to help find. nap, and prevent invasive species in America's wilderness areas, wild

### PROMOTE AWARENESS

One of the goals of Wild Spotter is to help raise public assumess about the possive species the by providing simple steps the public can take to prevent them from spreading into new areas.





### **ENGAGE THE PUBLIC**

America's natural areas. You can help us fight. back against harmful invaders by becoming a Wild Spotter volunteer or partner.

### **DEFEAT INVASIVES**

Mapping invasive species while you are visiting America's wild places will help management teams take direct action to present and contri invasive species and restore the areas they impa











### Works on iPhone, iPad, and Android devices















## Promotional Materials





HOME

VIDEOS

**PLAYLISTS** 

CHANNELS

DISCUSSION

ABOUT

Q

SORT BY Uploads PLAY ALL



4-H Clover Jam! 21 views • 1 day ago



Generic Base Conversion, Disaster Assistance and...

20 views • 1 week ago



**UGA Extension Agent** Spotlight | Keith Mickler

32 views • 1 month ago CC



2018 Corn Harvest in Irwin County, GA

420 views • 1 month ago



**UGA Extension Agent** Spotlight | Patrick Willis

40 views • 1 month ago CC



**UGA Extension Agent** Spotlight | Lee Anna Deal

1:15

49 views · 2 months ago CC



Download the Wild Spotter



JGA Extension Internship Program

161 views • 2 months ago



**UGA Extension Agent** Spotlight | Bob Waldorf ...

46 views · 2 months ago CC



Hit the Panic Button!

0:46

46 views · 3 months ago CC



Agent Spotligh

0:42

Robot Dunks Basketball

32 views · 3 months ago



How can you control Hemlock Woolly Adelgids?

45 views + 3 months ago CC



Do you have Mining Bees in your yard?

166 views · 3 months ago CC



**UGA Extension Agent** Spotlight | Pam Bloch

47 views • 3 months ago. CC



**UGA Extension Agent** Spotlight | Andrea Scarrow

80 views + 3 months ago CC



How to Take a Biomass Sample from Cover Crops

44 views · 4 months ago



**UGA Extension Agent** Spotlight | Brittani Kelley

118 views · 4 months ago CC



Agent Spotlight 0:49

**UGA Extension Agent** Spotlight | Lucy Ray

48 views · 4 months ago CC

## Facebook: Build Community (2568 followers)



Wild Spotter aims to build citizen science

## From Press Release to Media



## Press Release

5350 Hwy 61 North #7 White Bear Lake, MN 55110

Info@WildlifeFerever.org

For Immediate Release June 27, 2018

### WILD SPOTTERIM

A New National Effort to Increase Citizen Science Capacity to Map Invasive Species in America's Wild Places.

White Bear Lake, MN — In partnership with the University of Georgia - Center for Invasive Species and Ecosystem Health, USDA Forest Service, and other organizations across the United States, Wildlife Forever has launched a nationwide citizen science volunteer capacity-building program called Wild Spotter. Designed to help locate and map aquatic and terrestrial invasive species in Wilderness Areas, Wild & Scenic Rivers, and other wild places across the 193 million-acre National Forest System.

this new program engages and empowers the public, local communities, states, tribes, and many other groups to help the Forest Service confront the threats from harmful exotic plants, animals, and pathogens that invade America's beautiful and economically important wild places. The Wild Spotter program provides the tools these volunteers need to help locate, quantify, map, and report invasive species infestations in a simple and effective manner, while raising public awareness about invasive species and promoting collaborations across the landscape.

"We started the collaboration with these great partners to design and build the Wild Spotter program to expand citizen science volunteer capacity on 12 pilot National Forests and Grasslands distributed from East to West across the U.S., primarily to gather important occurrence data on invasive species and how they are impacting Wilderness Areas, Wild & Scenic Rivers, and other Natural Areas" said Mike Ielmini, National Invasive Species Program Manager in the USDA Forest Service headquarters in Washington, D.C. The first set of National Forest System units participating in the Wild Spotter program, includes the Nez Perce-Clearwater National Forest (Idaho), Lincoln National Forest (New Mexico), Santa Fe National Forest (New Mexico), Bridger-Teton National Forest (Wyoming), Payette National Forest (Idaho), Wallowa-Whitman National Forest (Oregon), Situsiaw National Forest (Oregon), Ozark-St. Francis National Forest (Arkansas), Daniel Boone National Forest (Kentucky), Chequamegon-Nicolet National Forest (Wisconsin), Monongabela National Forest

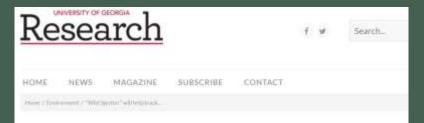


(West Virginia), and Shawnee National Forest (Illinois). Additional National Forests and Grasslands and other wild places across America will be added annually.

"As many new partners and groups scrambled to join this effort, and the demand increased for more places to be added to the Wild Spotter effort, we quickly realized the potential this program had to rapidly accelerate citizen-science support nationwide to address the invasive species threat, not just for National Forest Wilderness Areas and other wild places, but across the entire landscape. We have designed the program to benefit everyone across the landscape and boost citizen science capacity while raising public awareness and action". Jelimin added.

The elements within the Wild Spotter program provide adaptable tools and technologies for engaging a diverse array of public stakeholders and user groups, including natural resource agencies looking for community engagement opportunities. Utilizing a targeted list of "most wanted" species, volunteers receive information and support to get started as a Wild Spotter volunteer, all free. Once a Wild Spotter volunteer identifies and reports a species, the data is verified by experts and then made publically available through a networked invasive species inventory database hosted by the University of Georgia.

"The invasive species identification and mapping technology of Wild Spotter is based on the national Early Detection and Distribution Mapping System – EDDMapS for short", said Chuck Bargeron, Associate Director of the University of Georgia's Center for Invasive Species and Ecosystem



"Wild Spotter" will help track and stop spread of invasive species

INVIRONMENT



RECENT

Web-based directory crisis pregnancy cent

Alligators and timing reproductive disorde

A corps of innovatio

The art of communic science

Cold case

SPIANCE 🖺 💟 🔯 🛅 🕿 🖨

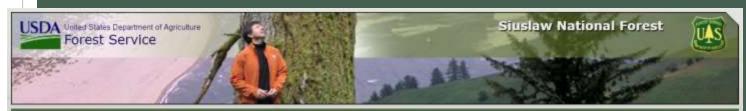
Like these kudzu bugs overwimering in bark, invasive species can reduce biodiversity and productivity, weaken local economies, and impact human and animal health.

By Clint Thompson

Thanks to a new app, citizen scientists can help researchers track and stop the spread of invasive species like feral pigs, Chinese privet, cogongrass and kudzu bugs by reporting and mapping sightings of these invasive species.

The University of Georgia Center for Invasive Species and Ecosystem Health partnered with the U.S. Forest Service and Wildlife Forever, a conservation Subscribe to ema

## From Press Release to Media



Forest Service Home About the Agency Contact the National Office

### Search

Siuslaw National Forest

▶ Home

o Site Map

- Special Places
- Recreation
- Alerts & Notices
- Passes & Permits
- Maps & Publications
- Land & Resources Management
- Learning Center
- Working Together
- About the Forest
- News & Events

### Contact Information

Siuslaw National Forest Supervisor's Office

3200 SW Jefferson Way Corvallis, OR 97331 541-750-7000

Cape Perpetua Visitor Center

2400 Highway 101 Yachats, Oregon 97498 541-547-3289

Oregon Dunes Visitor Center

855 Highway 101

### New Citizen Science Effort to Map Invasive Species on the Siuslaw National Forest

Release Date: Aug 13, 2018

The Siuslaw National Forest is expanding citizen science volunteer opportunities with a new pliot program called Wild Spotter. The Wild Spotter program provides tools the public, local communities, states, tribes, and many other groups can use to help locate, quantify, map, and report invasive species infestations in a simple and effective manner, while raising public awareness about invasive species and promoting collaborations across the landscape.

Through a collaboration with over 20 partners, University of Georgia - Center for Invasive Species and Ecosystem Health and Wildlife Forever are working with 12 pilot National Forests and Grasslands across the United States, including the Siuslaw National Forest, to gather important data on invasive species and how they are impacting wilderness areas, wild and scenic rivers, and other natural areas.

By downloading the free Wild Spotter Mobile App on your iPhone, iPad or Android device you can identify, map, and report invasive species found in your favorite wild places. Once a Wild Spotter volunteer identifies and reports a species, the data is verified by experts and then made publically available through a networked invasive species inventory database hosted by the University of Georgia. The database will be the first nationwide inventory of invasive species in America's natural areas.

"We are happy to be part of the Wild Spotter program and to offer the public a way to enjoy their national forest while helping us gather information on the locations of invasive species," said Forest Supervisor Angela Elam, "Invasive plants, pathogens, and animals can threaten recreational activities, productivity, and ecosystem health. This tool will help the forest to implement better strategies for prevention, control, and eradication."

If you want to become a Wild Spotter or learn more about the program, visit the website www.wildspotter.org.

### Alerts & Warnings

- Portion of Pioneer-Indian Trail temporarily closed
- Oregon Dunes Beach Access Limited March 15 - Sept 15 to Protect Snowy Plovers

View All Forest Alerts



Donate

OREGONCOASTDAILYNEWS





### POYTED BY: OREGONCOANTRAILYNEWS: AUGUST 18, 2018

The Siuslaw National Forest is expanding citizen science volunteer opportunities with a new pilot program called Wild Spotter. The Wild Spotter program provides tools the public, local communities. states, tribes, and many other groups can use to help locate, quantify, map, and report invasive species infestations in a simple and effective manner, while raising public awareness about invasive species and promoting collaborations across the landscape.

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If you want to become a Wild Spotter or learn more about the program, visit the website www.wildspotter.org

Information provided by SNF

## From Press Release to Media





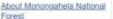
### Forest Service, partners implement Wild Spotter program

Sep 26; 2018

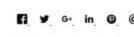








The Monongaheia National Forest was established following passage of the 1917 Weeks Act. This



ELKINS — In partnership with the University of Georgia Center for Invasive Species and Ecosystem Health, USDA Forest Service, and other organizations across the United States, Wildlife Forever has launched a nationwide citizen science volunteer program called Wild Spotter. Monongahela National Forest is participating in the pilot program, along with 11 other National Forests and Grasslands.

The Wild Spotter program targets invasive plants in and around wilderness areas. The program helps locate and map invasive species. It also engages and empowers the public, local communities, states, tribes, and many other groups to help the Forest Service confront threats from harmful exotic plants, animals, and pathogens that invade America's wild places.

Using a targeted list of "most wanted" species, volunteers receive information and support to get started as a Wild Spotter volunteer. Once a Wild Spotter volunteer identifies and reports a species, the



### Most Popula

Articles 🖼

- Residents speal
- . He can, he does
- Two dead after.
- . Pritt running for
- New River Gorg
- Wanted Hico mu
- Unofficial high a listed
- Patriots, Pirates
- Owner of popul rumors
- Sherff releases drug charges

Forest Service Home | USDA.gov | recreation.gov | USA.gov | Whitehouse.gov | Plug-Ins | FOIA | Accessibility Statement | Privacy Policy | Important Notices | Information Quality

## Presentations and Tradeshows



### **ROOM 103**

### Citizen Science in Action

Moderator: Anne Pearce, University of Wiscons

8:00 AM Volunteers and Citizen Science Megan Weber, University of Minn

8:20 AM Improving Invasive Species Man Anne Pearce, University of Wisc

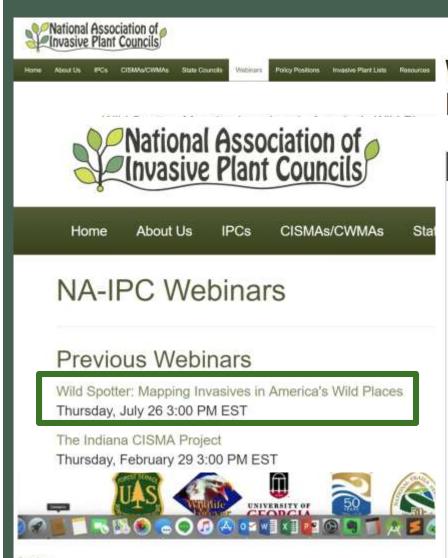
8:40 AM Mobilizing Citizen Scientists; An Lauren Bell, Invasive Species Ce

9:00 AM Empowering Citizens to Engage Beth Kallestad, University of Min

9:20 AM Wild Spotter: Mapping Invasives of America's Who Flaces
Chuck Bargeron, University of Georgia; Pat Conzemius, Wildlife Forever



## Webinars and Distance Presentations



### Wild Spotter: Mapping Invasive Species in **Idaho's National Forests**

Presentation title Wild Spotter: Mapping Invasive Species in Idaho's National Forests

Co-contributors Bargeron, C. T.

Your outreach role Presenter

Presentation date 10 May 2018

Professionals Target audience

Idaho Invasive Species Council Sponsoring organization

Scope State

Number of participants 20

Number of sessions

Contact hours 0.5

Total CEU/CLEs awarded

CEU type (if CEU is awarded) Category III CEUs

Mode of delivery Fully at a distance

peron is the Associate Director - Invasive Species and Information Technology at the University of Georgia Center for Invasive Species & Et .....

Mike Inimini is the National Invasive Species Program Manager at the USDA Forest Service headspurters in Washington, D.C.

## Emailing Lists

Facilic Northwest Native Freshwater Mussel Work
FW: Wild Spotter: Mapping Invasive
1 post by 1 author ⊕ 10+

### Aitkin

### [MAIPC] Fwd: REMINDER: Wild Spotter:

Wed Jul 25 06:01:24 PDT 2018

- Previous message (by thread): [MAIPC] REMINDER: Wild Spotter: Mapping Invasives
- Next message (by thread): [MAIPC] FW: Photos from todays outing
- Messages sorted by: [date] [thread] [subject] [author]

Hi.

If you're not outside tomorrow afternoon, you might want to watch this webinar announcing "Wild Spotter" - a new project out of Chuck Bargeron's Center for Invasive Species and Ecosystem Health. See his email below for more details and please spread the word.

----- Forwarded message ------

From: Chuck Bargeron <cbargero at uga.edu>

Date: Tue, Jul 24, 2018 at 1:36 PM

Subject: REMINDER: Wild Spotter: Mapping Invasives in America's Wild Places

To: NAEPPCBOARD at listserv.uga.edu

Jul 26, 2018 3:00 PM EDT at:

Register for Wild Spotter: Mapping Invasives in America's Wild Places on

https://attendee.gotowebinar.com/register/8187228954780337155

The University of Georgia - Center for Invasive Species and Ecosystem Health and Wildlife Forever partnered with the USDA Forest Service for the 50th anniversary of the Wild and Scenic Rivers Act and the National Trails System Act to recruit, train, and empower volunteers to provide critical scientific support with a new program to better address the expanding

### [CNIPM-L] Fwd: [Aliens-L] New Citizen Science Program Webinar: Wild Spotter: Mapping Invasives in America's Wild Places

Thu Jul 19 07:54:51 AKDT 2018

- Previous message: [CNIPM-L] looking for a good invasive species technician
- Next message: [CNIPM-L] August CNIPM meeting and update submission
- Messages sorted by: [date][thread][subject][author]

Good morning CNIPM,

If you're interested, check out the webinar and info below on a new citizen scientist initiative for mapping invasive species in "America's Wild Places".

----- Forwarded message ------

From: Chuck Bargeron < cbargero at uga.edu>

Adobe PDF 💮 Tell me what you want to do...

Date: Wed, Jul 18, 2018 at 3:57 PM

Subject: [Aliens-L] New Citizen Science Program Webinar: Wild Spotter:

Mapping Invasives in America's Wild Places

To: aliens-1 at list.auckland.ac.nz <aliens-1 at list.auckland.ac.nz>

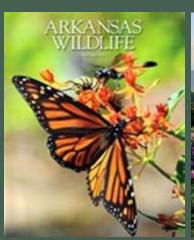
Register for Wild Spotter: Mapping Invasives in America's Wild Places on Jul 26, 2018 3:00 PM EDT at:

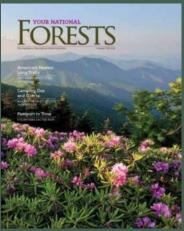
https://attendee.gotowebinar.com/register/8187228954700337155

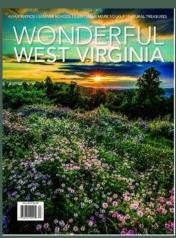
The University of Georgia - Center for Invasive Species and Ecosystem Health and Wildlife Forever partnered with the USDA Forest Service for the 50th anniversary of the Wild and Scenic Rivers Act and the National Trails System Act to recruit, train, and empower volunteers to provide critical scientific support with a new program to better address the expanding threat of aquatic and terrestrial invasive species. "Wild Spotter" is a nationwide effort to complete a comprehensive support investory, and



## Print Advertising: Targeted Publications



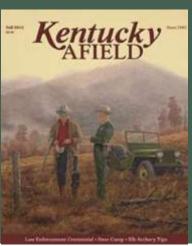


















## Wild Spotter – Target Audience

- Materials and messages are being crafted to be specific to target audiences based on age, hobbies/interests, media consumed, etc.
- Messages targeted at those whose hobbies include boating (e.g., motor-powered boating, waterskiing, sailboats, etc.), fishing, swimming, etc. would cover:
  - aquatic species identification
  - boat/equipment cleaning tips
  - pathways and hotspots
  - Aimed at being cross-posted on social media of organizations focused on similar issues (e.g., Clean, Drain, Dry; Play, Clean, Go; etc.)





# Volunteer Recruitment and Coordination

- Volunteer incentives are highly recommended (e.g., Pilot Forest starter-kits).
   Certificates, pins, stickers, etc. to help thank volunteers for their support.
- Forests promoting Wild Spotter and help connect volunteers locally.
- Providing a seasonal Wild Spotter coordinator at each of the 12 Pilot Forests to help recruit and manage citizen scientists.
- Full-time coordinator hired at UGA to work directly with each National Forest (Wild Spotter project coordinator Rachel (Beyke) Carroll).
- Mentoring program established to help support and expand program on each National Forest.

## Primary Collaborative Partners







- Technology (website, mobile apps, database, etc.)
- Training Materials
- Project Coordination

- Recruiting Forests and Forest personnel participation
- Verifying records
- Promotion and Volunteer Recruitment

- Marketing Campaign
- Partnerships

## Regionally Based Partners

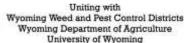
## Western Center



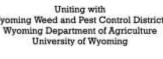










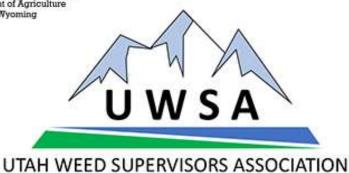














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Topically Based Partners







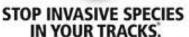












PlayCleanGo.org











## **RiversEdge West**

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## Become A Partner

- Partnerships are crucial for designing and implementing our resources as Wild Spotter works to manage invasive species through on-the-ground, community-based projects.
- Any organization can apply to become a partner
- Partners also directly solicited from programs that have similar goals; natural resource and invasive species management



Volunteer Where To Look What To Look For Places Partners Prevention Support

### Wild Spotter Partner Registration Form

All Chair hannels

### Required Fields denoted by "a" Company or Group \* Company/Group Name **EB** Primary Contact Name \* Last Name Primary Contact Address \* Address Line 1 Address Line 2 Zip Code Primary Contact Email \* Primary Contact Phone Number \* Phone Number Type of Organization \* Business Organization Conservation Advocates Education Organization Federal Agencies Pest Management Organization Public Land Managers Recreation Organization

## Future Plans

- Expanding reporting outside USDA Forest Service lands
- Adding real-time species maps to the Wild Spotter website and to the apps
- Potentially adding overlays (sourced from the forests) on the maps to show where trails, look-outs, etc. are, as these are often hot-spots or pathways for invasive species
- Proximity alerts "You are near a previously reported invasive species! Is it still there? Report in Wild Spotter!"

## Questions?



"We are happy to be part of the Wild Spotter program and to offer the public a way to enjoy their national forest while helping us gather information on the locations of invasive species. Invasive plants, pathogens, and animals can threaten recreational activities, productivity, and ecosystem health. This tool will help the forest to implement better strategies for prevention, control, and eradication."

Angela Elam, (interim) Forest Supervisor Siuslaw National Forest

New Citizen Science Effort to Map Invasive Species on the Siuslaw National Forest https://www.fs.usda.gov/detail/siuslaw/news-events/?cid=FSEPRD591506