CARE FOR THE RARE

INTERPRETATION RESOURCES

Abby Hird, Program Director, BGCI U.S.

Ray Mims, Conservation and Sustainability, United States Botanic Garden

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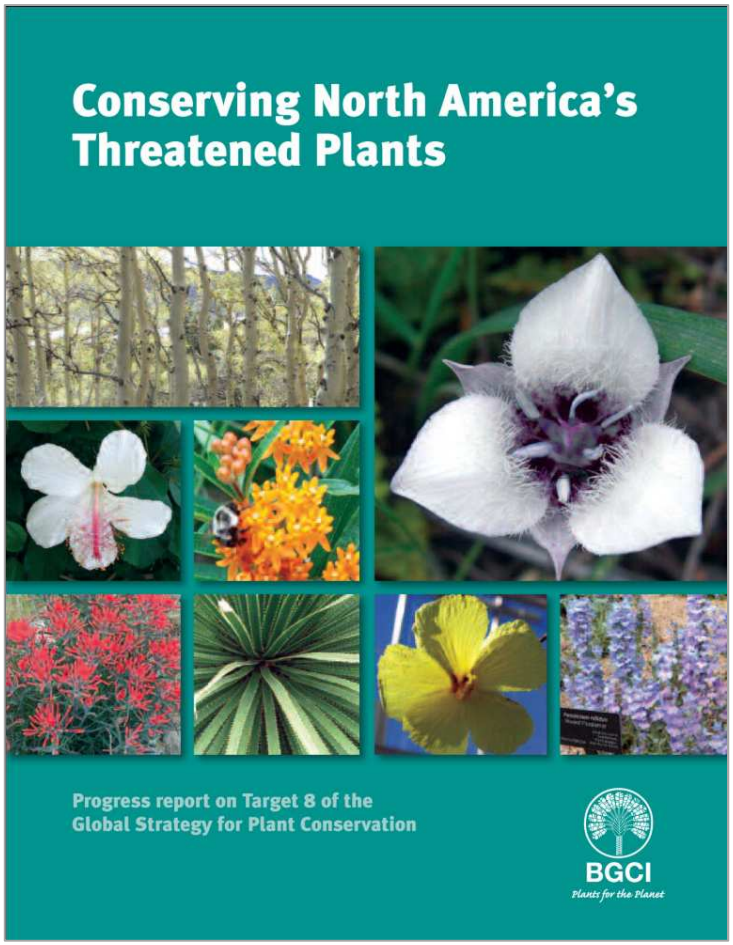
UNITED STATES BOTANIC GARDEN

North American Collections Assessment

- 9,496 threatened North American plant species
- 230 plant and seed collections surveyed
- Only 39% species preserved in collections



The ARNOLD ARBORETUM of HARVARD UNIVERSITY

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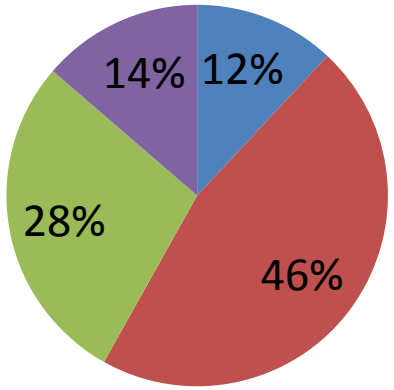
United States Botanic Garden

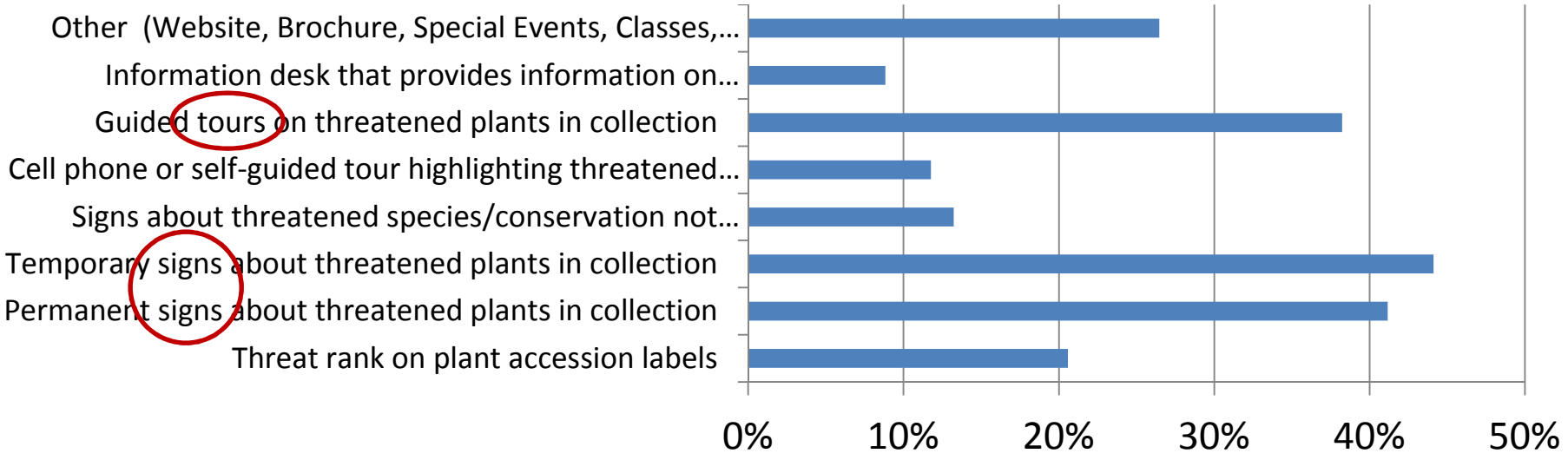
Interpretation for Conservation Survey (n=136)



Do you interpret threatened species in your garden?

- Yes
- Yes – we do some but would like to do more
- No – we don't do this now but would like to
- No – we have no plans to do this

How do you interpret threatened species in your garden?



Need and capacity

Interpretation for Conservation Survey (n=136):

- Variety of staff involved in interpretation
- Mainly signs on plants and tours
- More threatened species interpretation wanted
- Resources, information, and materials lacking

Solution = interpretation resources

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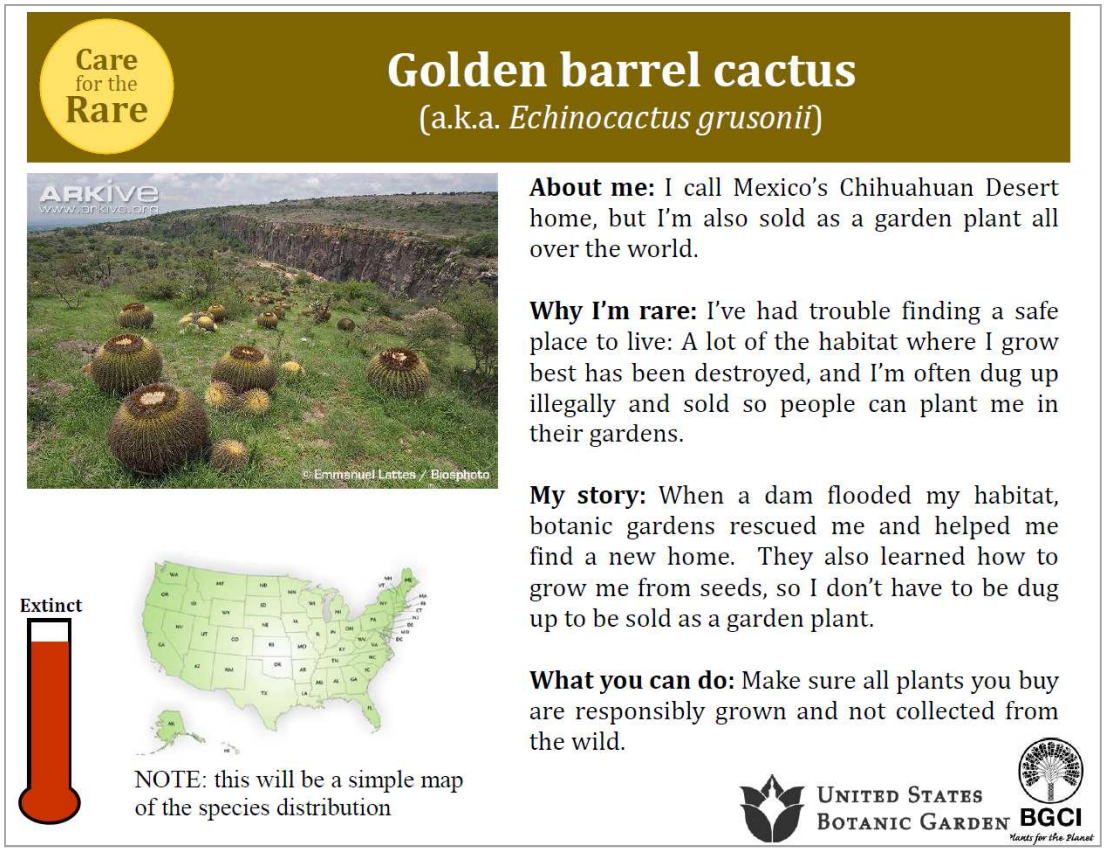
Sign testing and refinement



Content

- Voice, wording
- Overall message
- Map, images
- Tagline (Care for the Rare)
- Use of Threat Status

Layout

- Image and font size/position
- Color scheme
- Outdoor use factors
- Logos
- Amount of text vs. images

CARE FOR THE RARE

Ashe magnolia
(*Magnolia ashei*)

About me: I'm the rarest magnolia in North America, and make my only home in the hardwood forests of the Florida panhandle. .

Why I'm rare: I've had trouble adjusting to logging, invasive plant species, trampling and even trash dumping that is happening in my habitat.

My story: Many people are helping to protect the habitat where I grow, and you can find me in more than 50 botanic gardens around the world. Some gardens are studying how to grow me and bank my seeds as a long-term insurance policy against extinction.

How you can help: Volunteer to help protect and conserve natural areas where you live.

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PHOTO BY: STEFAN BLOODWORTH, DUKE GARDENS

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Public Gardens
Care for the Rare

From Alaska to Zambia, more than 2,500 public gardens around the globe care for rare plants. **HERE'S HOW**

A map of the public gardens world wide

Did you know? More than 500 rare plants are grown here at the United States Botanic Garden.

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BGCI *Plants for the Planet*

United States Botanic Garden

CONSERVATION: protecting and caring for rare plants in their habitats

EDUCATION: Displaying rare plants and sharing their stories

HORTICULTURE: learning to cultivate and display thousands of rare plants

SEED BANKING: leading seed collection efforts to fight extinction

RESEARCH: understanding rare plants to better conserve them

SEED BANKING PHOTO: CHRISTINE MURRAY/UNIVERSITY OF TEXAS AT AUSTIN. ALL OTHER PHOTOS: BGCI

www.bgci.org/usa/CarefortheRare

BGCI
Plants for the Planet

Botanic Gardens Conservation International
The world's greatest force for plant conservation

Care for the Rare Sign Library

Care for the Rare has been designed as a growing resource for public gardens to use for interpretation of threatened species and conservation issues.

Please keep us in the loop! If your garden develops signs using these templates please contact us. We can assist with the process, and would be thrilled to receive your finished Word documents for review and addition to the Sign Library.

Species Signs

All signs below have been developed by Care for the Rare collaborators, and have been reviewed for content and design. The signs are printable on 8.5x11 paper. Refer to our sign creation instructions for help on how to insert your garden's logo or customize the content. *Tip: save customized sign files as PDF's for best results when printing.

Species Name	Common Name	MS Word (editable)	PDF	Sign Creator
Brighamia insignis	Cabbage on a stick	B_insignis.docx	B_insignis.pdf	United States Botanic Garden
Cinnamomum kotoense	Canela	C_kotoense.docx	C_kotoense.pdf	United States Botanic Garden
Castanea pumila	Allegheny chinkapin	C_pumila.docx	C_pumila.pdf	State Botanical Garden of Kentucky
Echinocactus grusonii	Golden barrel cactus	E_grusonii.docx	E_grusonii.pdf	United States Botanic Garden
Gleditsia aquatica	Water locust	G_aquatica.docx	G aquatica.pdf	State Botanical Garden of Kentucky
Magnolia ashei	Ashe magnolia	M_ashei.docx	M_ashei.pdf	United States Botanic Garden

Pilot phase

USBG
Atlanta Bot. Garden
State BG of Kentucky

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Pilot phase

- Reached up to 700,000
- Three pilot sites
- Continuous outreach
- Updated website
- Growing sign library
- Growing use!

Care for the Rare

CARE FOR THE RARE

The logo at left is designed to aid visual identification of signs and threatened species in garden collections.

Engage visitors with the conservation and climate change stories of plants in your collection

ABBY HIRD, ANDREA KRAMER, AND RAY MIMS

Climate change is threatening the world's plant diversity at an unprecedented rate[1], yet plants are all too often left out of climate change discussion, policy, and action. Many have argued that this is largely a result of "plant blindness," the inability to see or notice plants in one's own environment, and an inability to recognize the importance of plants in the biosphere and in human affairs[2].

BGCI estimates that public gardens collectively maintain one third of the world's plant diversity and conserve (*ex situ*) more than one fifth of globally threatened species[3]. Gardens are well equipped to help cure plant blindness by telling the stories of the threatened (or near threatened) plants in their collections. This will help visitors literally see the trees for the forest, while increasing the understanding of *why* plants are so important and yet threatened by many factors, including climate change. It will also help individuals understand what they can do to help. If more people understand and appreciate plants and the need for plant conservation, they are also more likely to appreciate and support the mission and work of public gardens.

As simple as this sounds, the plant conservation community has yet to really figure out how to do this effectively, especially given limited resources and competing interests. So how can we make the most of what we have and work strategically to increase our ability to reach our visitors with more meaningful and memorable messages? The Care for the Rare project is a useful step that develops clear messages and conservation stories that gardens everywhere can use to highlight threatened plants in their collections. It also directly supports the Global Strategy for Plant Conservation's Target No. 14 ("the importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programmes").

Filling the interpretation gap

After the North American Collections Assessment identified more than 39 percent of North America's 9,496 threatened plants in public garden collections[4], BGCI US and the United States Botanic Garden realized that there was an opportunity to better educate the public about plant conservation. We proceeded to survey gardens across North America to understand current efforts to interpret conservation messages through public garden collections. As a result of the overwhelmingly positive response (110 gardens providing valuable input), we found that 86 percent of respondents do some interpretation of threatened plants in their collections, but would like to do more. We also received examples of what individual gardens are doing to tell conservation stories. Remarkably, more than half of all respondents expressed interest in assisting with the development of or in using template materials, so we moved ahead with the project.

How the project was developed

A first priority was coming up with a catchy slogan or memorable name for the project. A number of interesting suggestions were offered, and ultimately Care for the Rare was agreed upon. (Care for the Rare is a hybrid of several existing communication efforts within the public garden community, including phrases used by the University of Guelph Arboretum and the University of Washington Botanic Gardens.) Second, we produced mocked-up sign designs and enlisted a group of twelve volunteers involved in public garden interpretation and/or conservation to provide in-depth critiques, text suggestions, parameters, and format ideas. Finally, based on the feedback, we had signs professionally designed in a variety of file formats, so any interested garden of any size can use them.

These templates can be used as-is or customized. Each garden can easily add their logo and interesting facts about their collections to the templates using Microsoft Word. If more design control is desired, the templates are also available as Adobe InDesign and Photoshop files. Each garden can decide how to print and display the signs, but it can be as simple as printing an 8 x 11 (species sign) or 11x17 (panel) sheet and laminating or placing it in a plastic sleeve.

The following materials are now available:

- Care for the Rare logo: can be used to visually identify conservation messages and/or threatened species in your

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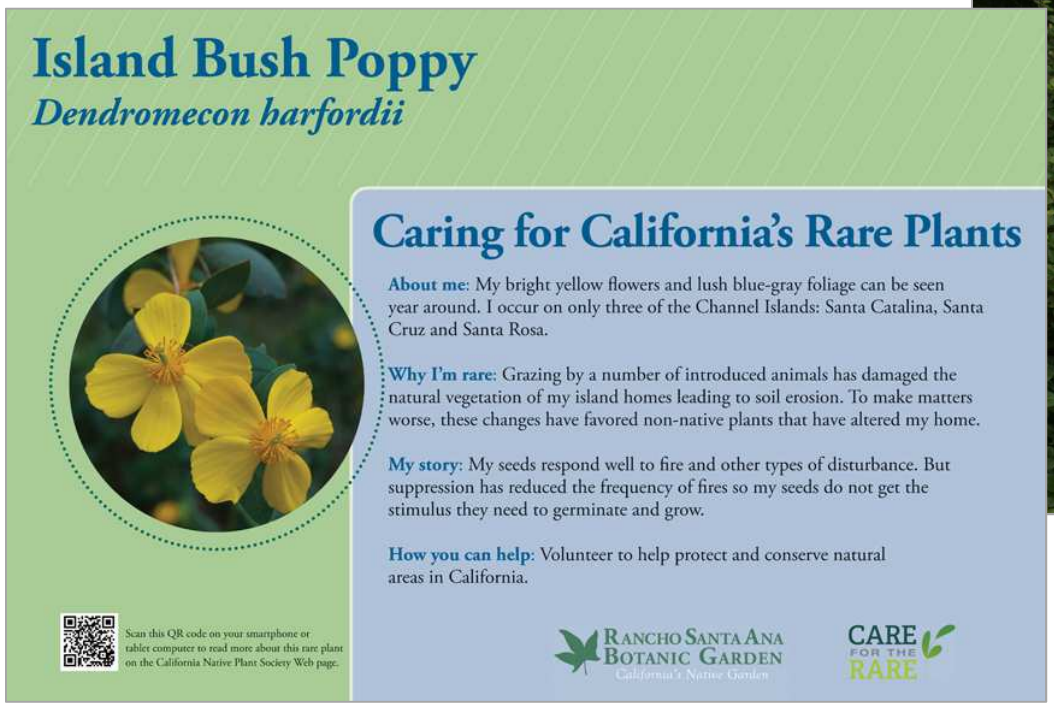
Broader launch

Rancho Santa Ana Botanic Garden's "Gateways to Communities" permanent exhibit



CARE FOR THE RARE

Broader launch

- Atlanta Botanical Garden
- Hoyt Arboretum
- National Tropical Botanical Garden
- Rancho Santa Ana Botanic Garden

- State Botanical Garden of KY
- San Diego Botanic Garden
- San Diego Zoo
- United States Botanic Garden

Sign reviewer volunteers

Last Name	First Name	Institution	Interpretation Expert	Conservation Expert
Allenstein	Pam	American Public Gardens Association	x	x
Bernstein	Harvey	Chicago Park District	x	
Bloodworth	Stefan	Sarah P. Duke Gardens		x
Bostwick	Michael	San Diego Zoologial Global	x	x
Byrne	Mary	Bioloque		x
Cavender	Nicole	The Morton Arboretum		x
Ceska	Jennifer	State Botanical Garden of Georgia	x	x
Chapman	Grace	Lewis Ginter Botanical Garden	x	
Cruse-Sanders	Jennifer	Atlanta Botanical Garden		x
Dorgan	Anamari	The Morton Arboretum	x	
Dosmann	Michael	The Arnold Arboretum		x
Ehrlinger	Dave	San Diego Botanic Garden	x	x
Griffith	Patrick	Montgomery Botanical Center		x
Jordan	Ric	University of Guelph Arboretum		x
Kutcher	Joan	Mountain Top Arboretum	x	
Lahmeyer	Sean	Huntington		x
Manion	John	Birmingham Botanical Gardens	x	
Marinelli	Janet	Blue Crocus Consulting	x	
McCue	Kimberlie	Desert Botanical Garden		x
Michener	David	Matthaei Botanical Gardens	x	x
Mims	Ray	United States Botanic Garden	x	x
Mosquin	Daniel	University of British Columbia Botanical Garden		x
Musial	Kathy	Huntington Botanical Gardens		x
Novy	Ari	United States Botanic Garden	x	x
Richardson	Mark	New England Wild Flower Society	x	
Rounsaville	Todd	State Botanical Garden of Kentucky		x

https://www.surveymonkey.com/s/CarefortheRareSignReview

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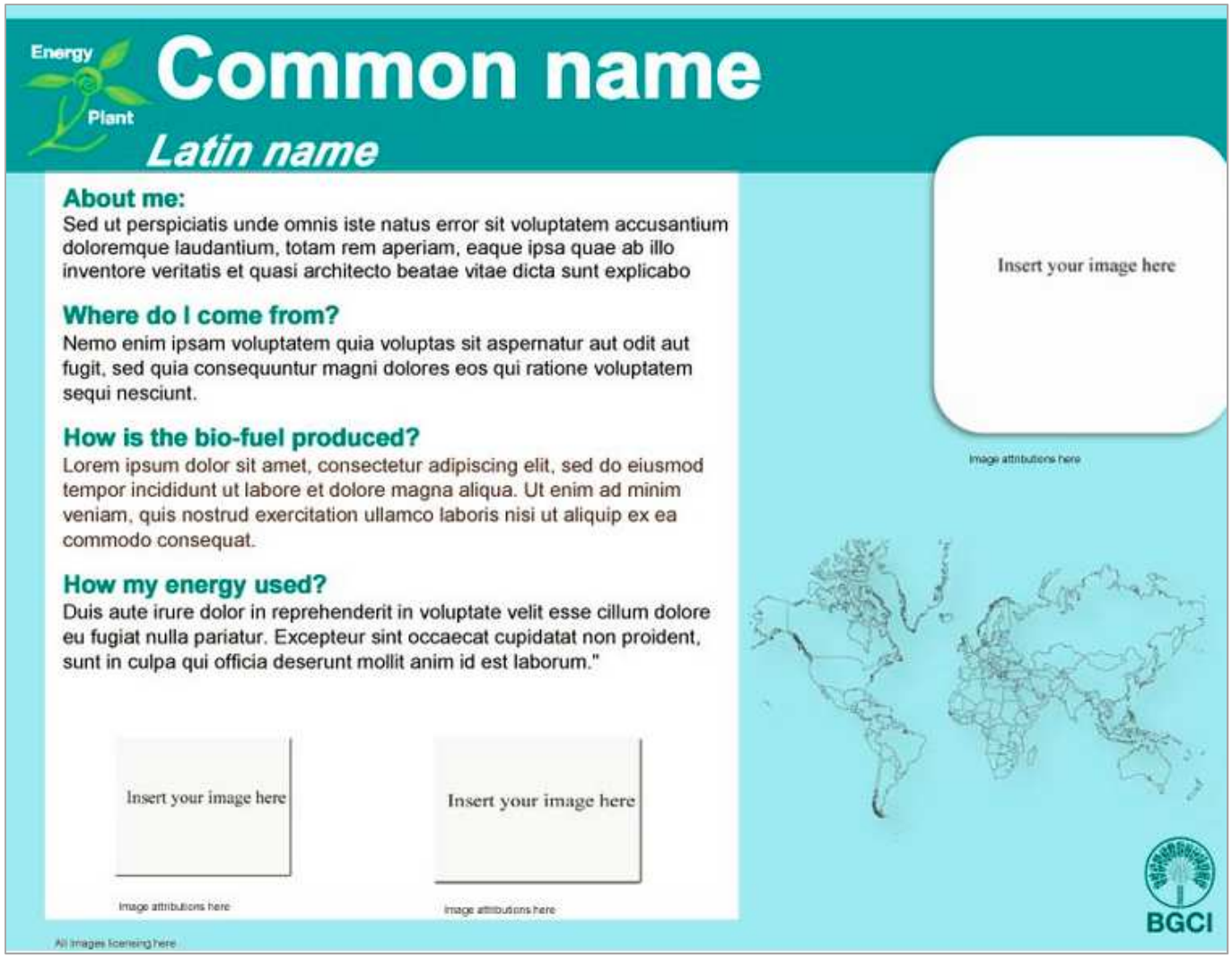
BGCI's Energy Gardens Project



www.bgci.org/education/energyplants/

This year

- Vendor discounts for Care for the Rare signs

- Mobil app

Geogardens.org
Engage, Educate, and Show the Way

- Gather visitor feedback

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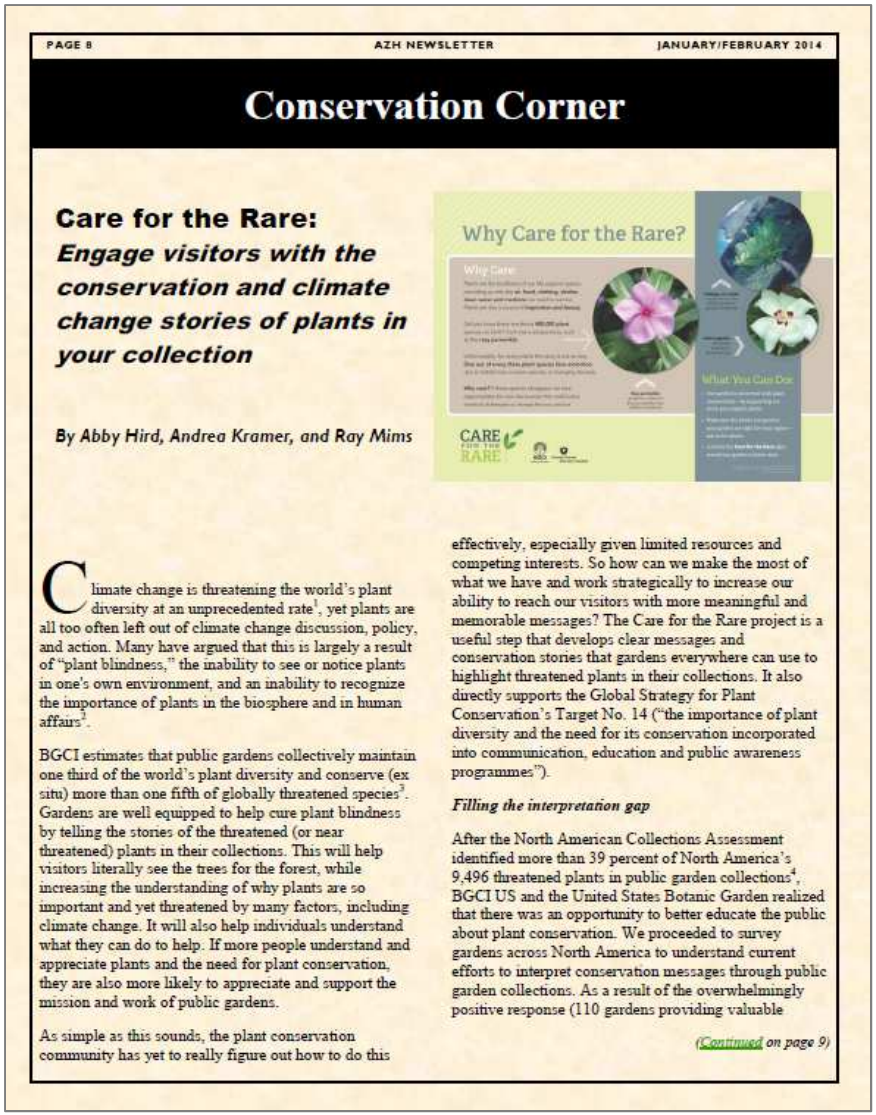
Make a Care for the Rare tour!



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Conservation Corner

Care for the Rare:
Engage visitors with the conservation and climate change stories of plants in your collection

By Abby Hird, Andrea Kramer, and Ray Mims

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(Continued on page 9)

- Free
- Adaptable
- Easy
- Contribute your efforts and information to the broader conservation community
- I'm happy to help!

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United States Botanic Garden

Thank you!

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www.bgci.org/usa/CarefortheRare

We are grateful to the 136 individuals who took the interpretation survey, our graphic designer Judi Connelley, and the following people who provided critiques:

Holly Shimizu, Ray Mims, and Laura Condeluci, United States Botanic Garden
Lauren Umek, Chicago Botanic Garden, Northwestern University
Stefan Bloodworth, Sarah P. Duke Gardens
Anne Brennan, Ambler Arboretum at Temple University
Jenny Cruse-Sanders, Atlanta Botanical Garden
Chris Earley, Arboretum at the University of Guelph
Bobbi Jo Holmes, Museum of Life + Science
Catherine Hubbard, Albuquerque BioPark Botanic Garden
Ric Jordan, Arboretum at the University of Guelph
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Caroline Lewis, The Cleo Foundation
Barb McKean, Royal Botanical Gardens, Ontario
Clinton Morse, EEB Plant Growth Facilities, University of Connecticut
Pauline Nash, Rancho Santa Ana Botanic Garden
Todd Rounsaville, State Botanical Garden of Kentucky
Rebecca Sucher, Missouri Botanical Garden
Laura Vogel, Gardens of the Delaware Psychiatric Center
Julie Warsowe, The Arnold Arboretum of Harvard University
Jennifer Wolff, Missouri Botanical Garden

Thank you!

www.bgci.org/usa/CarefortheRare

Abby Hird, BGCI-US Program Director

abby.hird@bgci.org