

Designing Citizen Science for Communities

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this design needs improvement

new test data entered

Bio-Diversity-Data

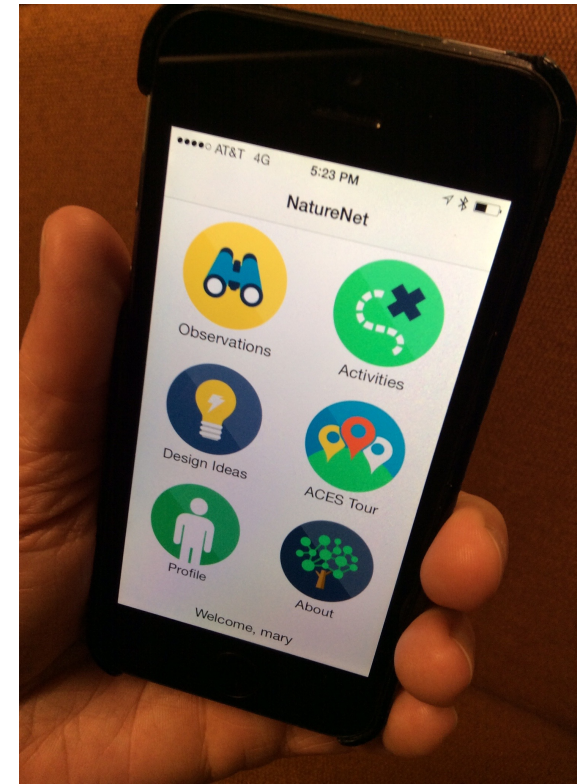
Design-Ideas

Please enter Design-Ideas

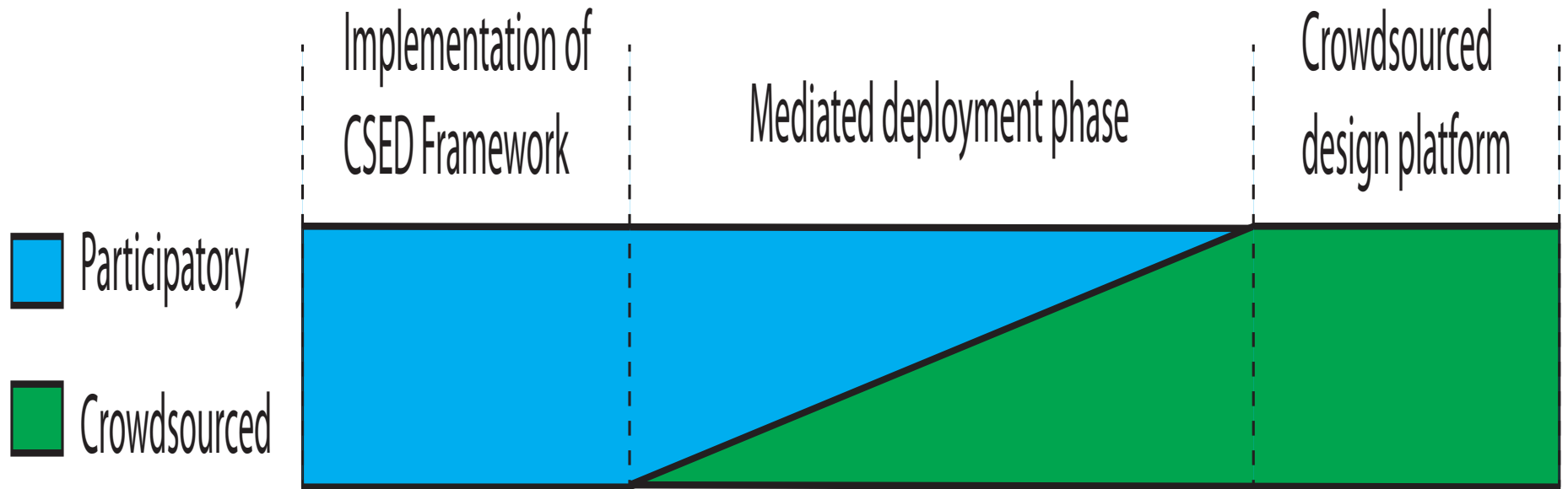
Community Driven Environmental Projects

- NSF funded project for Advances in Informal Science Learning (#1423207)
- Community-Driven Projects That Adapt Technology for Environmental Learning in Nature Preserves
- Three communities:
 - ACES in Colorado
 - Anacostia Watershed in Maryland
 - Reedy Creek in North Carolina

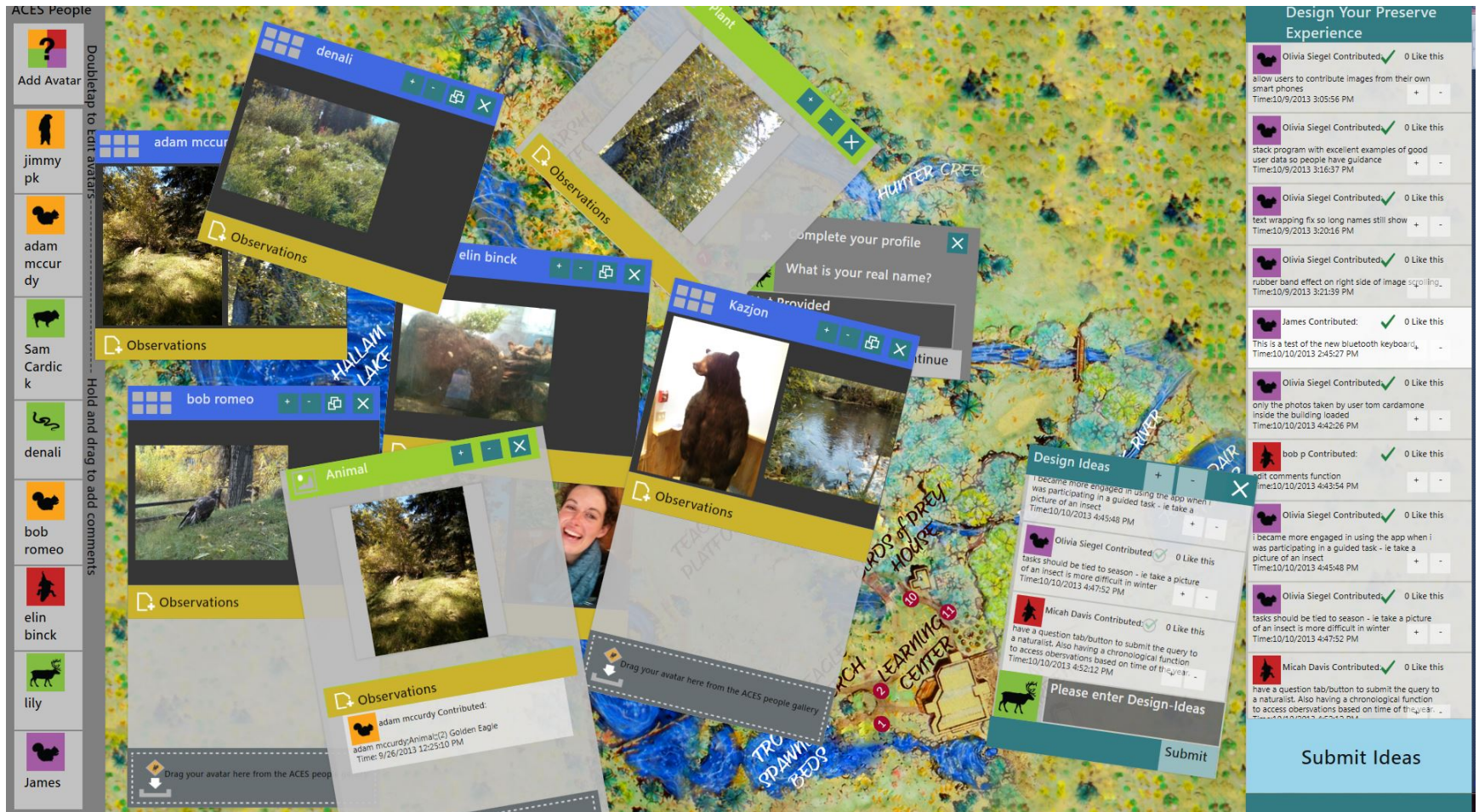
Key concept is the adaptation of core technology to support communities in their environmental projects.



Community Driven Environmental Projects via Crowd Sourced Experience Design



Tabletop at Aspen Center for Environmental Studies



NatureNet Web Site - Reflection



Explore



Communities



Projects



Design Ideas



Welcome,

Explore: Learn about nature in your area



Communities: Share your observations and ideas

Projects: Improve and shape sustainability initiatives



Design: New ways to use NatureNet

Recent Observations

- Travis**
Sep 25 2016
- akash**
Sep 24 2016
- Liz**
Sep 24 2016
- Liz**
Sep 24 2016
- Liz**
Sep 24 2016

Show More

Recent Design Ideas

- Jenny**
Sep 11 2016
- Jenny**
Sep 11 2016
- Jenny**
Sep 11 2016
- Jenny**
Sep 11 2016
- Jenny**
Sep 11 2016

Contributions shown on a map

The image shows a screenshot of the NatureNet Citizen Science Community interface. The top navigation bar includes icons for Explore, Communities, Projects, and Design Ideas, along with a user profile icon and the text "Welcome, m". The main area is a satellite map of the United States with several green location pins. The left sidebar, titled "Observations", lists five entries:

- Travis**, Sep 25 2016, Not native, 0 likes, 0 comments.
- akash**, Sep 24 2016, Beautiful mushroom, 0 likes, 0 comments.
- Liz**, Sep 24 2016, 0 likes, 0 comments.
- Liz**, Sep 24 2016, Conservation Landscaping with..., 0 likes, 0 comments.
- Liz**, Sep 24 2016, 0 likes, 0 comments.

Map data ©2016 Google, INEGI Imagery ©2016 TerraMetrics | Terms of Use | Report

Data collections for projects

The screenshot displays the NatureNet website interface. At the top, a dark blue navigation bar contains the NatureNet logo (a green tree icon) and the text "NatureNet CITIZEN SCIENCE COMMUNITY". To the right of the logo are four icons: binoculars for "Explore", a group of people for "Communities", a hiker for "Projects", and a lightbulb for "Design Ideas". On the far right of the navigation bar is a user profile icon and the text "Welcome, m".

Below the navigation bar is a dark blue sidebar on the left with the heading "Projects" and a dropdown arrow. Underneath, it says "All Projects" and lists several project categories, each with a circular icon: "Native or Not?", "Mushrooms", "Free Observation", "Watch Your Waterway", "Caterpillars", "Ask a Naturalist", "Runoff Rundown", "Turtle Tracking", "Tracks", "Snow Study", and "Signs of Spring".

The main content area is light gray and features the "Runoff Rundown" project header. It includes a globe icon with a green location pin, the title "Runoff Rundown", and a description: "What happens to stormwater in your backyard? Take a photo and tell us about it!". Below this is a section titled "Recent Contributions" which displays a grid of six photo submissions. Each submission shows a photo, the contributor's name, and the date:

- Jenny (Sep 11 2016) - Photo of green plants.
- Jenny (Sep 11 2016) - Photo of green plants.
- Jenny (Sep 11 2016) - Photo of a brick walkway.
- Carol (Aug 16 2016) - Photo of yellow flowers.
- Carol (Aug 16 2016) - Photo of yellow flowers.
- Carol (Aug 16 2016) - Photo of yellow flowers.

At the bottom of the "Recent Contributions" section is a blue link that says "Show More".

Discuss design ideas

NatureNet
CITIZEN SCIENCE COMMUNITY

Explore Communities Projects **Design Ideas**

Welcome, r

Design Ideas

Crowdsourcing design is a way for anyone to contribute to the NatureNet experience. Designers change the world and the NatureNet project gives everyone a chance to be a designer. Your design idea can be a new way of using NatureNet in your community, a new way to use mobile technology for learning about sustainability or changes in the environment, or a new feature on the web site.

Join the discussion below with an idea or challenge of your own, comment on someone else's idea, or vote for your favorite idea.

NatureNet is a moderated site. Postings that are inappropriate or irrelevant will be deleted.

Design Idea Design Challenge

WRITE A DESIGN IDEA...

Adding photos coming soon

Choose Idea Type:

SUBMIT

Design Ideas

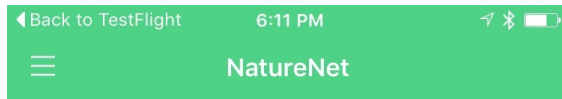
Jenny
Sep 11 2016
It would be useful if we could e...
0 0 0

Jenny
Sep 11 2016
The like icon is a bit small.
0 0 0

Jenny
Sep 11 2016
The like icon is a bit small.
0 0 0

Design Challenges

iPhone app - Explore



What is NatureNet?

A community of citizen environmentalists whose members keep making it better

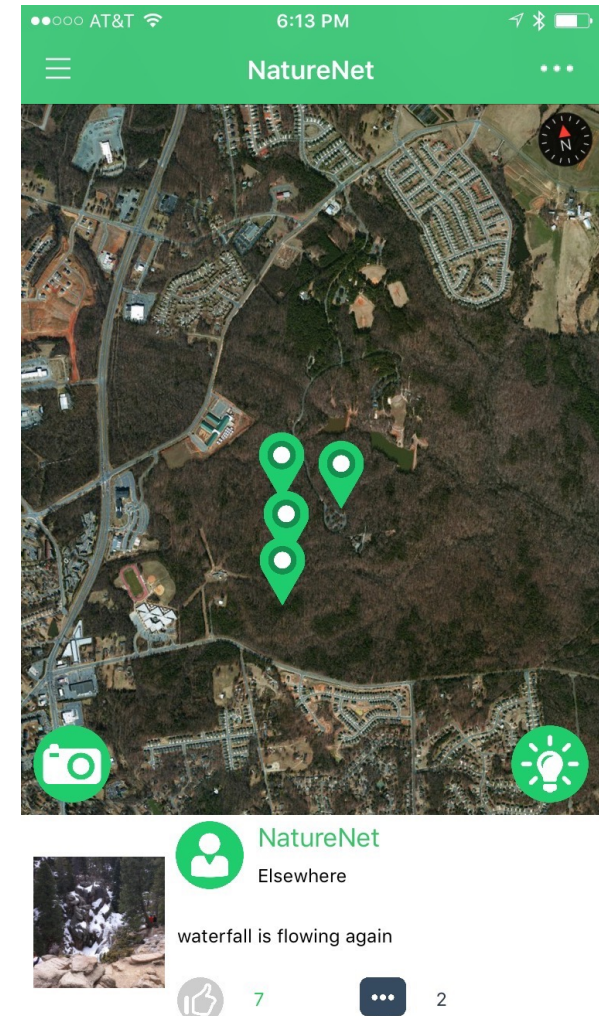
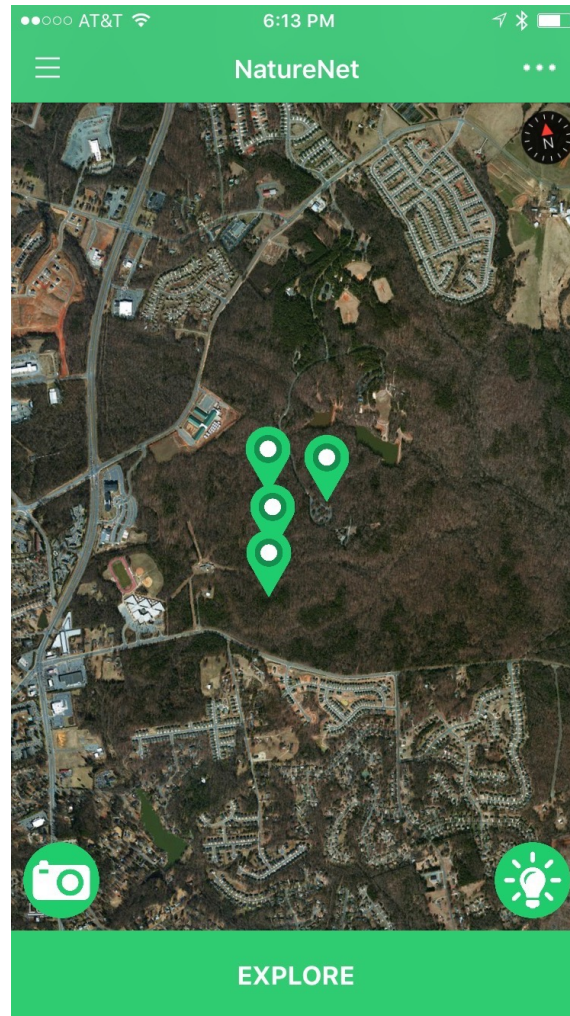


- LEARN** about nature in your community
- SHARE** your observations and ideas
- SHAPE** nature projects in your local community
- DESIGN** this nature technology with your community

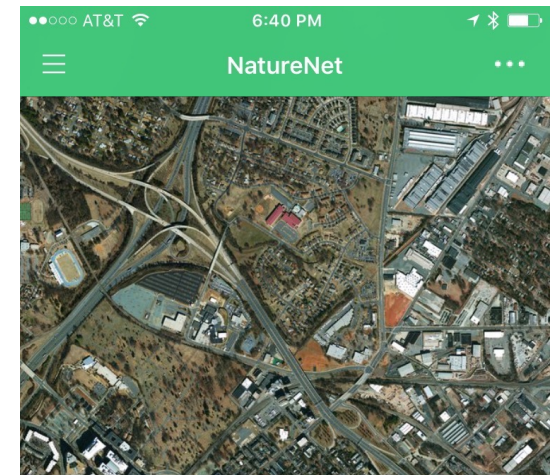
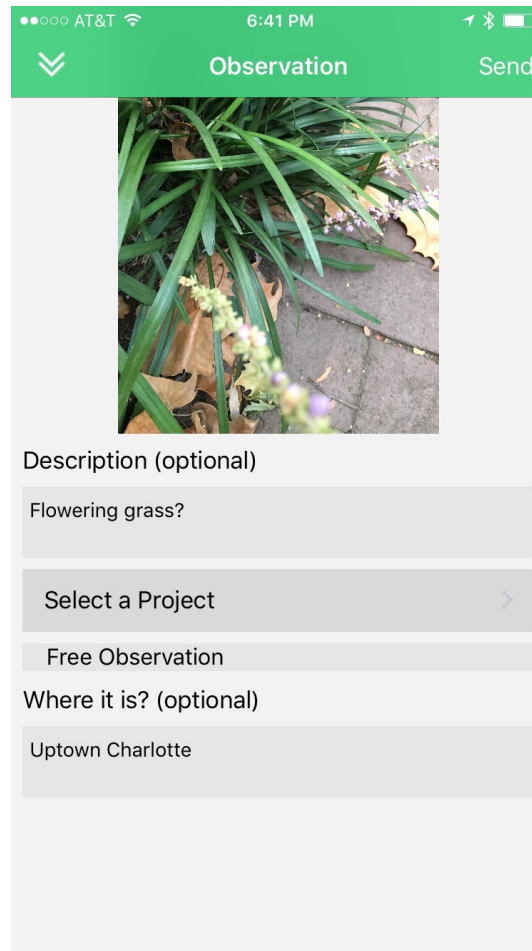
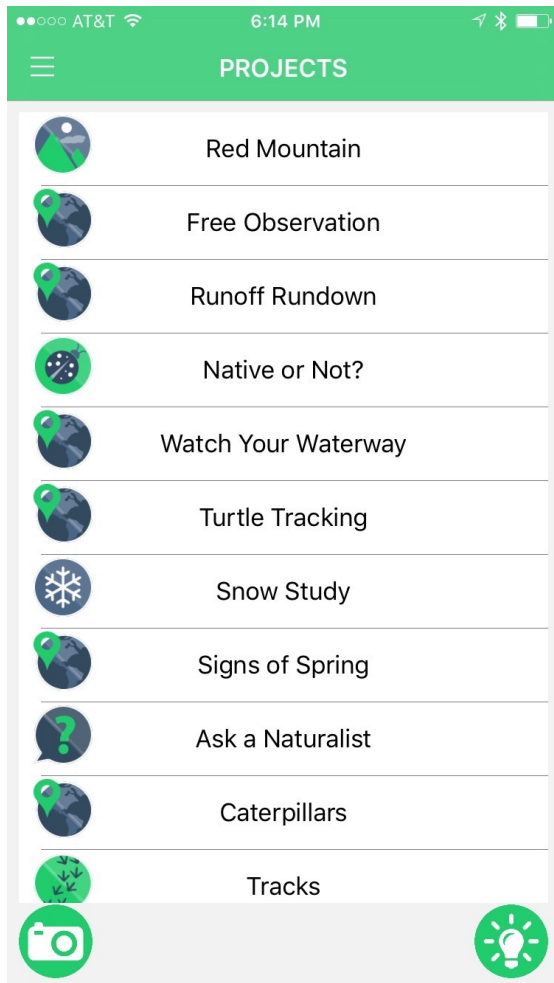
What is NatureNet?



Do you want to participate in a biodiversity-preserving project in your area? Or do you have an idea for a new project and want to get a community behind you? Join NatureNet today, and don't just be a voice in the crowd: be part of a crowd with a voice!



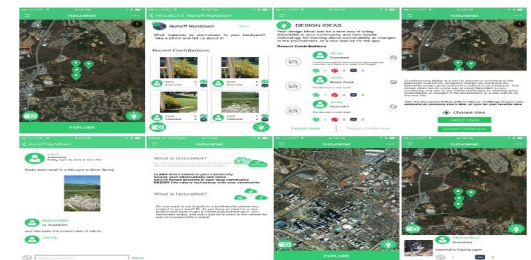
Contribute to projects



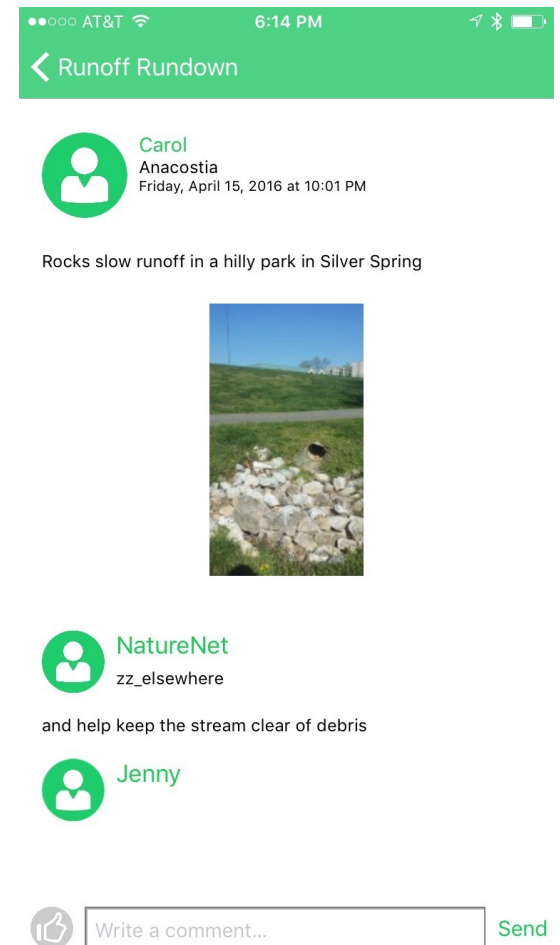
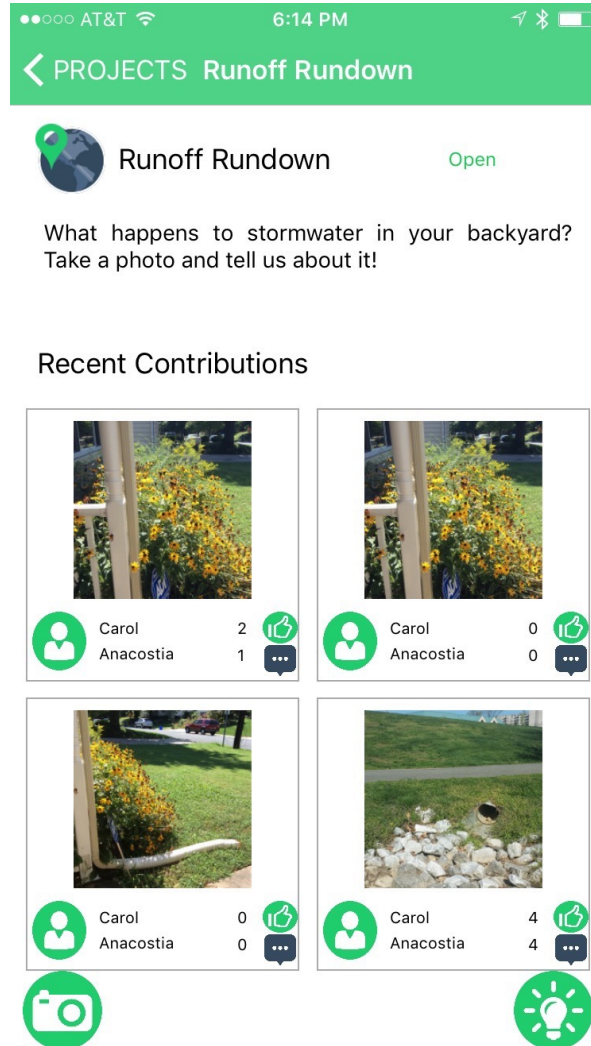
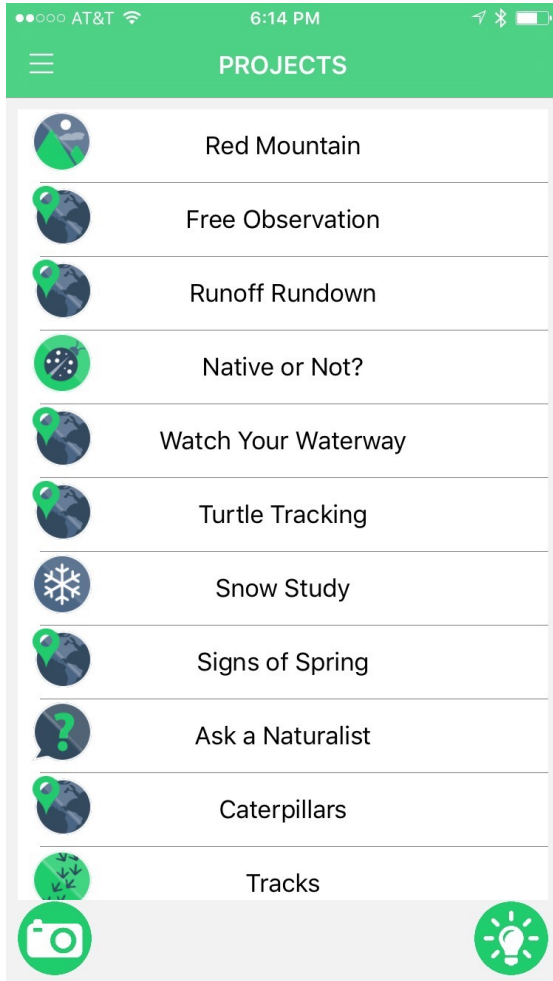
Choose Image

Camera

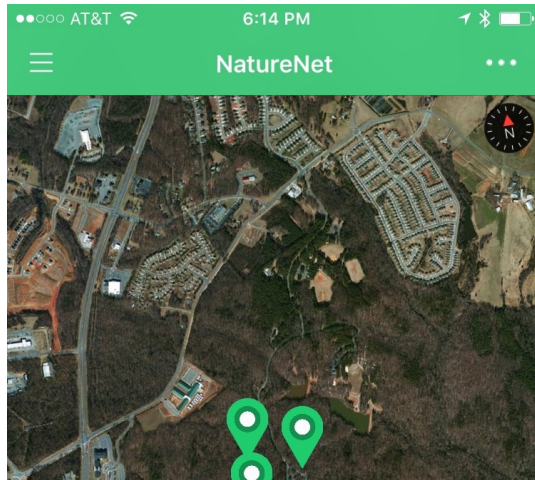
Gallery



Comment on projects




Contribute new ideas and challenges



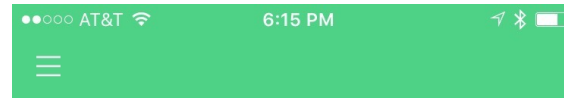
Crowdsourcing design is a way for anyone to contribute to the NatureNet experience. Designers change the world and the NatureNet project gives everyone a chance to be a designer. Your design ideas can be a new way of using NatureNet in your community, and new to use mobile technology for learning about sustainability or changes in the environment, or a new feature on the web site.

Join the discussion below with an idea or challenge of your own, comment on someone else's idea, or vote for your favorite idea.

 Choose Idea

Design Ideas

Design Challenges



DESIGN IDEAS

Your design ideas can be a new way of using NatureNet in your community, and new mobile technology for learning about sustainability or changes in the environment, or a new feature for the app.

Recent Contributions



Jenny

Elsewhere

It would be useful if we could enlarge image and comment and like box to make icons bigger



0



0



0



Jenny

Reedy Creek

The like icon is a bit small.



0



0



0



Jenny

Anacostia

The like icon is a bit small.



0



0



0



Design Ideas

Design Challenges



DESIGN CHALLENGES

A design challenge is a question – for example: How can the NatureNet app collect temperature data?

Recent Contributions



Mike

Elsewhere

The "X" close button for popup windows on the website should:
- have high enough contrast to be visible and accessi...



1



0



0



Travis

Reedy Creek

How can we inform users that they must log in before submitting contributions?
* Visually disable controls and show a message...



0



0



0



NatureNet

Elsewhere

What optional demographic data should we collect from our users?



1



0



7



Design Ideas

Design Challenges

NatureNet and Community-driven Citizen Science

Crowd sourcing experience design: Deploy the design in **stages**:

1. original design developed by the design team
2. a participatory design process
3. fully crowd-sourced design

Design process is centered on the concept of **ideas** to improve the nature preserve experience

The community can **contribute, comment, like, and implement** their ideas for NatureNet.

Future qualitative and quantitative assessments of the affect of CSED on the citizen science project, on user **motivation**, and on the **creativity** of ideas submitted by users.

This work is supported by NSF 1221513 VOSS: Crowdsourcing interaction design for citizen science virtual organizations and NSF 1423207: AISL Community-Driven Projects That Adapt Technology for Environmental Learning in Nature Preserves

NatureNet Resources

- Citizen Science Web site:
 - <https://nature-net.org/>
- NatureNet Research Web site:
 - <http://research.nature-net.org/>
- iOS App on Apple Store:
 - NatureNet
- Android App on Google Play
 - Coming soon