Alaska Weeds ID mobile application: usage, updates, and new target audiences

Gino Graziano, University of Alaska Fairbanks, Cooperative Extension Service

The Alaska Weeds ID mobile application was released in August 2015 as a free app for the public to identify invasive plants and report the location of weeds. The overall goal of the app was to educate the public on identification and to acquire more information from the public that contributes to the Alaska Exotic Plant Information Clearinghouse. While downloads of the app are substantial, use of the reporting function has been minimal. In fact, Extension receives more reports via walk-in, phone call, and web-based submission forms. We suspect low reporting is because of the complexity of the report form and that most reports Extension receives are general inquiries. Updates for the app will address this by incorporating a general inquiry form; however, this will not address adding more data into AKEPIC. Other strategies we may employ include targeting land management professionals, advertising, and increasing the number of workshops on identification and reporting with the app. Strategies for increasing use will benefit from promotion of the app by others, in particular when targeting land management professionals.
Alaska Weeds ID Mobile Application

Gino Graziano
UAF, Cooperative Extension Service
Invasive Plants Instructor
gagraziano@alaska.edu
Outline

• Initial creation and goals
• How it works
• Reports
• Updates
• New goals and directions
Alaska Weeds ID Mobile Application

• Created by the UAF Cooperative Extension Service, partnering with University of Georgia, with funding from Western Alaska LCC

• Available on IOS and Android
  – 1149 IOS downloads
  – 265 Android downloads

• Works when without coverage
Alaska Weeds ID Mobile Application

• Goals:
  – Enable identification
  – Enable reporting of weeds
  – Confirm identification of reported weeds
  – Add more data from the public to existing databases
  – Create awareness
# The Key

## Alaska Weeds ID

<table>
<thead>
<tr>
<th>Categories</th>
<th>Leaf Type</th>
<th>Leaf Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic</td>
<td>Leaf Margin</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Opposite (1)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Alternate (10)</td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td>Whorled (0)</td>
<td></td>
</tr>
<tr>
<td>Grass</td>
<td>Entire/Smooth (5)</td>
<td></td>
</tr>
<tr>
<td>Grass</td>
<td>Serrated/Toothed (4)</td>
<td></td>
</tr>
<tr>
<td>Herbs/Forbs</td>
<td>Spiny (1)</td>
<td></td>
</tr>
<tr>
<td>Herbs/Forbs</td>
<td>Hairy (1)</td>
<td></td>
</tr>
<tr>
<td>Shrub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vine</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cirsium vulgare
bull thistle

Family
Asteraceae

Known in Alaska?
Yes (uncommon, but locally abundant where present)

Native Species Look-alikes
3 native Cirsium species are found in meadows and woods in Southeast Alaska, Yukon Territory, and the Aleutian Islands. These native plants have stems that are not winged

Ecological Impact
Competes with native plants for soil moisture and nutrients; decreases forage quality for grazing animals through displacement of native plant species;

Distribution and Abundance
Most commonly found in disturbed areas such as pastures, rangelands, roadsides, and ditches but can also move into undisturbed grasslands, meadows, and forest openings; Currently known in Alaska from Southeast, Southcentral, and Kodiak; Native to Europe, Western Asia, and Northern Africa;

Management
Hand pulling and mowing has been shown to be effective if maintained for at least 4 years:
Weeds in your area

1 - Northern Arctic
2 - Seward Peninsula/Nulato Hills
3 - Yukon Kuskokwim Delta and Bristol Bay
4 - Alaska Peninsula
5 - Kodiak Archipelago
6 - Aleutian and Pribilof Islands
7 - Coastal Forests
8 - South Central Alaska
Reporting weeds

2015-10-26 10:26 AM

Study Type**

Site Area** (Acres)

Tap Here to Add Photo

Latitude  58.29942
Longitude  -134.416
Accuracy   50.0 m

Any Extra Information Goes Here

Add Species  Save

Categories  All Species  Favorites  Recent

Aquatic
Grass
Herbs/Forbs
Shrub
Tree
Pin Location:
LAT:31.476442 LNG:-83.524559

Polygon Drawn:
Approximately 0.7230 Acres
Latitude: 58.29942
Longitude: -134.416
Accuracy: 50.0 m

broadleaved pepperweed

Infested Area** (Acres)
Canopy Cover**
Disturbance Age (Years)
Stem Count
Herbarium**
Control Action
Aggressiveness

Remove

Add Species

Cancel

Done

ALA
TNFS
UAH
Not Collected
Not Curated
Other
None
Negative Report Forms
oxeye daisy chokecherry bird v...
1.5219 acre Polygon Drawn

Report Forms
broadleaved pepperweed
2015-10-26 10:26 AM

Report Forms
broadleaved pepperweed
15-10-26 10:26 AM
What the reports look like
Pest: English ivy, *Hedera helix* L.
Submitted By: Gino Graziano, - G graziano@alaska.edu
Observation Date: Oct 14, 2016
Site Name: alaska21637EE8
Latitude: 61.18455
Longitude: -149.7957
Comments: This was a cotoneaster

Image:
Record ID: 4778334

Location Information
Elevation: 0 meters
Location: Anchorage Borough, Alaska
Coordinates: 61.1846, -149.796
Site Name: alaska21637EE8
Coordinate Uncertainty: 10 Meters
Course: 0
Speed In Meters Per Second: 0

Infestation Information
Gross Area: 0 acres
Infested Area: 0.001 Acres
Canopy Cover: 1%
Infestation Status: Positive

Reporter Information
Reporter: Gino Graziano
Observation Date: October 14, 2016
Date Entered: October 14, 2016
Source Type: iPhone
Reported By: Gino Graziano
Email: Gagraziano@alaska.edu

Species Information
Herbarium: None

Verification and Review
Reviewed: Not Verified

Survey Information
Study Type: Highest Priority Species
Comments: This was a cotoneaster
Record Review
Use this form to verify and release occurrences.

- Reviewed By: Gino Graziano
- Verification Method: Photographs
- Identified By: Gino
- Identification Date: 10/14/2016
- Identification Credibility: Incorrect
- Report Source ID: Select One

- Reviewed/Verified
- Released (show record in EDDMapS)
- Private (show record - hide Lat/Long)

Reviewer Comments: This is a cotoneaster
Updates

• Increase the number of plants
• Allow for what is this query without the form
• Suggestions on where-geographically to report species
New goals and directions

• Increase reports received
  – 25 in the last year
  – 9 different participants including me
• Agency partners doing informal surveys
• More informal use by us
• Explore incorporating other taxa
AK Weeds ID