

ScienceBase

Data Integration and Management Tool

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ScienceBase Training and User Support

Cherokee Nation Technologies (CNT)

Contractor to DOI - USGS Fort Collins Science Center

March 2016



Agenda

- ScienceBase Overview (5 min)
- Navigating ScienceBase (5 min)
- Adding Items to ScienceBase (5 min)
- Exercise 4 (15 min)

What is ScienceBase?

- Open source software
- Metadata Catalog
- Data Repository
- Collaborative data management and integration platform
- Supports public and secure data discovery and distribution
- Web services to drive other applications
- New features and transforms every 2 weeks

Sponsored by: USGS Core Science Analytics, Syntheses and Libraries with support from USGS Climate and Land Use, USGS Ecosystems, and the LCC Network

Navigating ScienceBase

<https://www.sciencebase.gov/catalog/>

<https://www.sciencebase.gov/catalog/>

Public View

← → ↻ <https://www.sciencebase.gov/catalog/> ☆ ☰

USGS
science for a changing world

ScienceBase-Catalog Communities Help ▾ Log in

Type some text to search... Search Advanced Search

I want to:

- Login
- Add Data
- Access Help
- Report a Problem
- Follow ScienceBase on Twitter

Browse by **Category**

- Map
- Data
- Physical Item
- Project
- Publication
- Web Site

Browse by **Tag**

- Animal Behaviour
- Biogeochemistry
- Ecosystems
- Hazard Mitigation
- Hydrology
- All tags...

Browse by **Location**



USGS Data Release

[Click here](#) to see USGS Data Releases in ScienceBase.

USGS scientists and data producers: [click here](#) for more information on using ScienceBase to complete a Data Release as part of the new USGS Instructional Memoranda (IM) requirements.

Featured Item

 [Color Hawaii Shaded Relief – 200-Meter Resolution, Albers projection](#)

The color Hawaii shaded relief data were derived from National Elevation Dataset (NED) data, and show the terrain of Hawaii at a resolution of 200 meters. The NED is a raster product assembled by the U.S. Geological Survey, designed to provide national elevation data in a seamless form with a consistent datum, elevation unit, and projection. Data corrections made in the NED assembly process minimize artifacts, permit edge matching, and fill sliver areas of missing data. The National Atlas also includes a Lambert Azimuthal Equal Area projection shaded relief file; this file is the same data in an Albers projection.

Categories: Web Site; Tags: DEM, Digital Elevation Model, Hawaii, NED, Shaded Relief, [All tags...](#)

Logged In View

USGS
science for a changing world

ScienceBase-Catalog Communities **Add Item** **My Items** More Help

sean_finn@us.gov

Type some text to search... Search Advanced Search

My Items

- Great Northern Landscape Conservation Coopera
- Landscape Patterns Catalog
- LC MAP - Landscape Conservation Management
 - LC Map upload training_final
- Mapping Pacific Northwest Riparian Areas: Meas
- Sage Grouse Conservation Status 2015
- Sage-grouse WAFWA-LCC Collaboration
- State CHAT Data Community
 - Updated Boundary for GNLC

Communities

- 2010 Colorado Wildfires: Fourmile Canyon and R
- Amphibian Research and Monitoring Initiative
- Biodiversity Information Serving Our Nation (BISO)
- Bureau of Ocean Energy Management - Environm
- California Seafloor Mapping Program
- Coastal and Marine Spatial Planning
- Columbia Environmental Research Center
- Community for Data Integration (CDI)
- Data Basin
- Data Preservation, Informatics, and Laboratories
- DataOne
- Digital Crust
 - Earth Science Information Partners
- Eastern Geographic Science Center
- Eastern Montana Fisheries
- Energy and the Environment in the Rocky Mounta
- Energy Development and Natural Resources in th
- Fisheries
- FLMA Collaborative Visitor Transportation Survey
- Forest and Rangeland Ecosystem Science Center
- Fort Collins Science Center
- Geo Data Portal Catalog
- Global
- Grand Canyon Monitoring and Research Center
- Great Lakes Restoration Initiative
- Great Lakes Science Center (GLSC)
- Greater Platte River Basin
 - Hydrologic Instrumentation Facility
- Inland Harmful Algal Blooms
- Integrated Landscape Modeling (ILM)
- ... More ...

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Featured Item

U.S. Geological Survey Earthquake Hazards Program (EHP) website

Provides and applies relevant earthquake science information and knowledge for reducing deaths, injuries, and property damage from earthquakes through understanding of their characteristics and effects and by providing the information and knowledge needed to mitigate these losses.

Categories: Web Site; Tags: disturbance, earth, earthquake hazards, earthquake occurrences, earthquakes, All tags...

Browse Folders

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
URL: <https://www.sciencebase.gov/catalog/>
Contact Information: sciencebase@usgs.gov
Page Last Modified: Thursday, January 21, 2016

ScienceBase-Catalog Version: 2.100.2 | Feedback | Support | ScienceBase Notify | Twitter
Build Version: 2.99-91-g3a227c0-0 (2016-01-21 16:54)

Searching ScienceBase

See Search section in the
Supplemental Information

What is a ScienceBase Item

- **ScienceBase item** is any digital object in ScienceBase. Items can be created for a wide variety of purposes. For example, users can create new items to store and share uploaded data (almost any file type), metadata information or links to online resources. Users can also create links to existing ScienceBase items.
- All items in ScienceBase have an identical format (based on the ScienceBase [item core model](#)). This means that all items have the same metadata fields and can be described using the same edit form.
- ScienceBase **items** include **records and folders**. In other data management systems, folders are just containers for records. In ScienceBase, because folders and records have the same fields and format, folders can be described, viewed and utilized in the same ways as records. All items in ScienceBase, both records and folders, are discoverable through Internet search engines.
- Relationships between ScienceBase items are defined with the terms **parent and child** items. For example, a parent folder can contain child subfolder, which in turn can be a parent item to a child record.

Item View

Communities → Training Community → NCTC ScienceBase and Dat... → Staffed Visitor Stations - US...

Staffed Visitor Stations - USFWS, Pacific Southwest Region

Go to View Manage

Dates

Publication Date : 2015-02-17
Time Period : 2015-02-17

Citation

U.S. Fish and Wildlife Service, 20150217, Staffed Visitor Stations - USFWS, Pacific Southwest Region: U.S. Fish and Wildlife Service: Sacramento, CA, <https://www.sciencebase.gov/catalog/item/editForm/new?parentId=56993d34e4b0fd3f7fa7a13>

Summary

This dataset depicts staffed visitor stations within the Pacific Southwest Region of the U.S. Fish and Wildlife Service. Staffed visitor stations may be refuge offices that are open to the public during specified hours, or may be dedicated visitor centers. This dataset does not include kiosks or other areas which contain information for visitors but are not staffed. The locations of these stations are based on the USFWS Corporate Master Table, with additional editing and updates based on the input of field and visitor services staff.

Child Items (2)

- test 2
- test item

Contacts

Point of Contact : Justin Epting
Distributor : Justin Epting
Metadata Contact : U.S. Fish and Wildlife Service, Division of Refuge Planning
Originator : U.S. Fish and Wildlife Service
Publisher : U.S. Fish and Wildlife Service

Attached Files

Click on title to download individual files attached to this item or [download all files listed below as a compressed file.](#)

Spatial Services

ArcGIS REST Service : <https://www.sciencebase.gov/arcg>
ArcGIS WMS Service : <https://www.sciencebase.gov/arcg>

Communities

- Training Community

Associated Items

Associate an Item

Tags

Folder View

Communities → Training Community → NCTC ScienceBase and Dat... → Staffed Visitor Stations - US...

Staffed Visitor Stations - USFWS, Pacific Southwest Region

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Communities

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Associated Items

[Associate an Item](#)

Map

Click to go to interactive map

Adding Items to ScienceBase

- **Adding Items to ScienceBase**
- **Import File:** Select **Import File** to create a new item that will include a file from a local system.
- **Create new record:** Select **Create New Record** to add a metadata record which could include a project description, citation with a url to a publication, or a web link to a data service.
- **Import a URL:** Select **Import URL** to bulk load GitHub repository urls.
- Users must be logged in and have write privileges.

Supported File Types

- **Supported File Types**
- Almost any file type may be uploaded. Some file types are considered “special” and are processed by ScienceBase to enable interactive online viewing.
 - Shapefile (.shp): Item can be viewed in the Interactive Map. WMS, WFS, and KML services are created.
 - GeoTiff (.tif): Item can be viewed in the Interactive Map. WMS, WCS, and KML services are created.
 - Service Definition (.sd): Item can be viewed in the Interactive Map. ArcGIS REST service and ArcGIS WMS Services are created.
- Multiple files may be uploaded to a single item and these files may be uploaded individually or bundled together in a zipped file.
- Recently added support for larger files greater than 2GB . Using the new Uploader tool, you can now upload large files from your local system, Google Drive, and Dropbox.

Metadata

- Datasets should have associated metadata that adhere to FGDC endorsed standards – either Content Standard for Digital Geospatial Metadata (CSDGM) or the ISO metadata standard.
- Metadata files can be uploaded and stored as resources in ScienceBase items.
- The ScienceBase edit form **does not** contain all the fields that are required by FGDC endorsed metadata standards. Filling out the edit form is not an alternative to uploading FGDC compliant metadata.
- ScienceBase has the capability to recognize and parse FGDC endorsed Content Standard for Digital Geospatial Metadata (CSDGM) and ISO metadata files that are in XML format. This means that information from these files can be used to populate ScienceBase fields.

Adding a Item

(Demo Tool)

Managing Permissions

- A user that has write permission to an item has the ability to change the privacy settings of individual ScienceBase items (both folders and records). This means that they can **control who can view and who can edit** individual items in their community.
- To change privacy settings, click on an item's main "**Manage**" drop down menu (located in the upper right corner), and select "**Manage Permissions.**"
- In the "**Manage Permissions**" menu, it is possible to limit permissions to individual users or groups of users. By default, items are set to inherit the permission settings of their parent item.
- **Note:** If the person is not found in the drop-down selection, they do not have an account to ScienceBase).

Exercise 4: Upload a Service Definition File (15 min)

- **Goals:**
- Log into ScienceBase
- Execute a Search
- Create a folder with student name
- Upload a Service Definition file with a metadata file
- Upload a zipped version of the original shapefile
- Manage permissions

1. Log In

- Go to <https://www.sciencebase.gov/catalog/>
- Click on Log In
- Enter username and password
 - username is your DOI email address
 - password is your Active Directory Password

NPS:

- User name is your UserPrincipalName, which is usually first initial last name followed with @nps.gov

2. Execute a Search

- In the Search Box, enter NCTC ScienceBase and click Search
- From the Search Results list, click on the **NCTC ScienceBase and DataBasin Training 2016**

3. Create a Folder with Student Name as Title

- Change view to Folder View by clicking on View>Folder View
- Or, alternatively to change to Folder View, click on NCTC ScienceBase and Data Basin Training 2016 from breadcrumb
- In the “**Name**” field enter your First/Last Name and in the “**Description**” indicate that it is your test folder and select “**Create.**” (see below example)

4. Upload a Service Definition file with metadata

- Click on **“Import File(s)”**
- Click on **“+Add Files”**
- Browse to files and select:
 - **d:\CollaborativeWebMapping\MyData\metadata-StaffedVisitorStations_R8.xml**
 - **d:\CollaborativeWebMapping\MyData\StaffedVisitorStations.sd**
- **Note:** To multi-select files, left-mouse click on one file and hold down the shift button on keyboard and left-mouse click on the other desired file.
 - Click on **“Open”**
- Select **“Done Uploading”**
- To scrape the metadata, select **“Load Item from FGDC Metadata-Replacing Existing Values”**
- **Don’t save yet**

5. Upload the Zipped Shapefile for easier downloading

- To upload the zipped shape file, edit the item by selecting **Manage>Manage Permissions**.
- Go to the Extensions tab and choose 'Shapefile' as the extension type in the bottom window
- Browse to the zipped shapefile **d:\CollaborativeWebMapping\MyData\StaffedVisitor Stations_R8.zip** and select it. It will then be added to this ScienceBase record and made available for download in ScienceBase and later in DataBasin, after we import this record into DataBasin.

6. Manage Permissions

- To manage permissions on who can view and edit the ScienceBase Item, click on an item's main "**Manage**" drop down menu (located in the upper right corner), and select "**Manage Permissions**"
- In the "**Manage Permissions**" menu, it is possible to limit read and write permissions to individual users or groups of users. By default items are set to inherit the permission settings from their parent item.
- In the **Item Writable By** section, de-select "**Inherited**" to create custom permission settings
- The "**USER**" field in the **Item Writable By** section, begin typing in the name of your neighbor to give them write access to the ScienceBase item. Their name should appear in the drop-down selection list and click on their name and select **Add** and then **Save**.
- **Note:** If the person is not found in the drop-down selection, they do not have an account to ScienceBase.

Questions and Comments?

ScienceBase Help: <https://www.sciencebase.gov/about/using-sciencebase>

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