

AntWeb - Visual Browsing Redesign - Design Document

Version 2

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Updated Overview

The purpose of this document is to illustrate a high level view of the proposed redesign to AntWeb, and to gather feedback in advance of translating the design into development.

In an effort to showcase AntWeb's incredible imagery, and the fact that it has imaged so many species and specimens, it is suggested that the way in which a user browses through the taxonomy be changed from a primarily textual one to more of a visual one. By doing this, a user can more quickly see representative images of a given taxon, and see how many photos AntWeb has for that taxon at a glance.

The pages that follow are representative of the overall design and user experience.

The primary experience will be the visual browsing mode, with the taxonomic overview being the flip side to the data. In addition, users will have access to a textual lists for the given level in the taxonomy, reusing the design direction of the recent specimen list updates to AntWeb, as well as larger maps.

That being said, depending on which mode the user is interacting with a a given level, that will carry through as they navigate - if a user is browsing by way of imagery, that will be their primary path; if browsing by way of the textual list, that will be their primary path. All paths eventually lead to a specimen.

The tools for comparing, mapping, creating field guides, and downloading data will be more integrated into what the user is looking at, so they can quickly select items to perform those tasks upon.

The comparison tool will be reworked to show larger images, and have improved usability.

Region hompages will now be able to exist in a visually rich fashion even before a curator has been assigned to it, by way of leveraging the design guide of the visual browsing mode.

Additionally, the AntWeb homepage will be overhauled to call out the fact that there is such high resolution imagery.

Revision Notes:

Version 2 of this document ties in feedback from the first version, related to:

- A desire to have an "Overview" page, and a page that is simply a listing of all elements in the given level of the taxonomy
- Being able to change the default thumbnail view from head to either profile or dorsal
- Being able to quickly see all thumbnails for a given item, in their actual aspect ratio (not confined to the perfect square)
- Having a larger, more obvious map
- Viewing the "big picture" version of the specimen as its own page (not an overlay)

The following pages have been updated (and added to) to reflect this feedback. Pages which are new, or have had their annotations changed/updated are called out with a ★.

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Browsing through the taxonomic hierarchy - Overview View ★

Viewing the overview for the given level in the taxonomy. Previously, this was called "Description". See page 4 for more specifics related to all top of the page elements.

1 - Current Level in Taxonomy

Displays the current level in the hierarchy. If the user clicks on "Images", they go to the visual browsing view of this level of the hierarchy (see page 4). If the user clicks on "List", they go to the list view (page 5).

2 - Description

Display of the overview, consisting of all the taxonomic history, etc. Effectively, all of the textual data currently displayed on the description page on AntWeb, depending on one's level in the taxon. At the specimen level, includes all the summaries of elevation, location, where collected, etc.

3 - Representative Image and Small Map

When available, display of representative image, and small map (for a visual example of this display with a small map, see page 6, annotation 2).

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Current View: Global: All Antweb Change View ▾

1 **Family: Formicidae** Overview | Images | List View in AntCat

Classification: Order: Hymenoptera Family: Formicidae

2 **Taxonomic History (provided by Barry Bolton, 2013)**
Extant: 21 subfamilies, 66 tribes, 305 genera, 12,465 species, 2,094 subspecies
Fossil: 4 subfamilies, 8 tribes, 132 genera, 634 species, 4 subspecies
Formicariae Latreille, 1809 PDF: 124 Type-genus: Formica. AntCat AntWiki

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Browsing through the taxonomic hierarchy - Image View ★

Browsing through the taxonomic hierarchy, starting from the family level, displaying the subfamilies.

1 - Current View

Displays the current view (e.g., Global, Madagascar, Neotropic, etc), with ability to change the view by way of a dropdown menu.

2 - Current Level in Taxonomy

Displays the current level in the hierarchy. If the user clicks on "Overview", they go to the overview view of this level of the hierarchy (see page 3). If the user clicks on "List", they go to a textual listing of all items in this level of the taxonomy (see page 5). When available, a "Map" option is displayed as well, sending the user to the geographic distribution map (see page 10).

3 - Classification

Taxonomic hierarchy displayed horizontally. Acts as a navigational aid for quickly traversing back up the hierarchy as one browses into the genera, species, and specimens.

4 - Number of Items in Taxonomy

Displays the number of items at this level in the hierarchy, how many are imaged, and how many sub-items there are, so that the user can drop directly into that level.

5 - View in AntCat

Link to view this taxon in AntCat.

6 - Tools

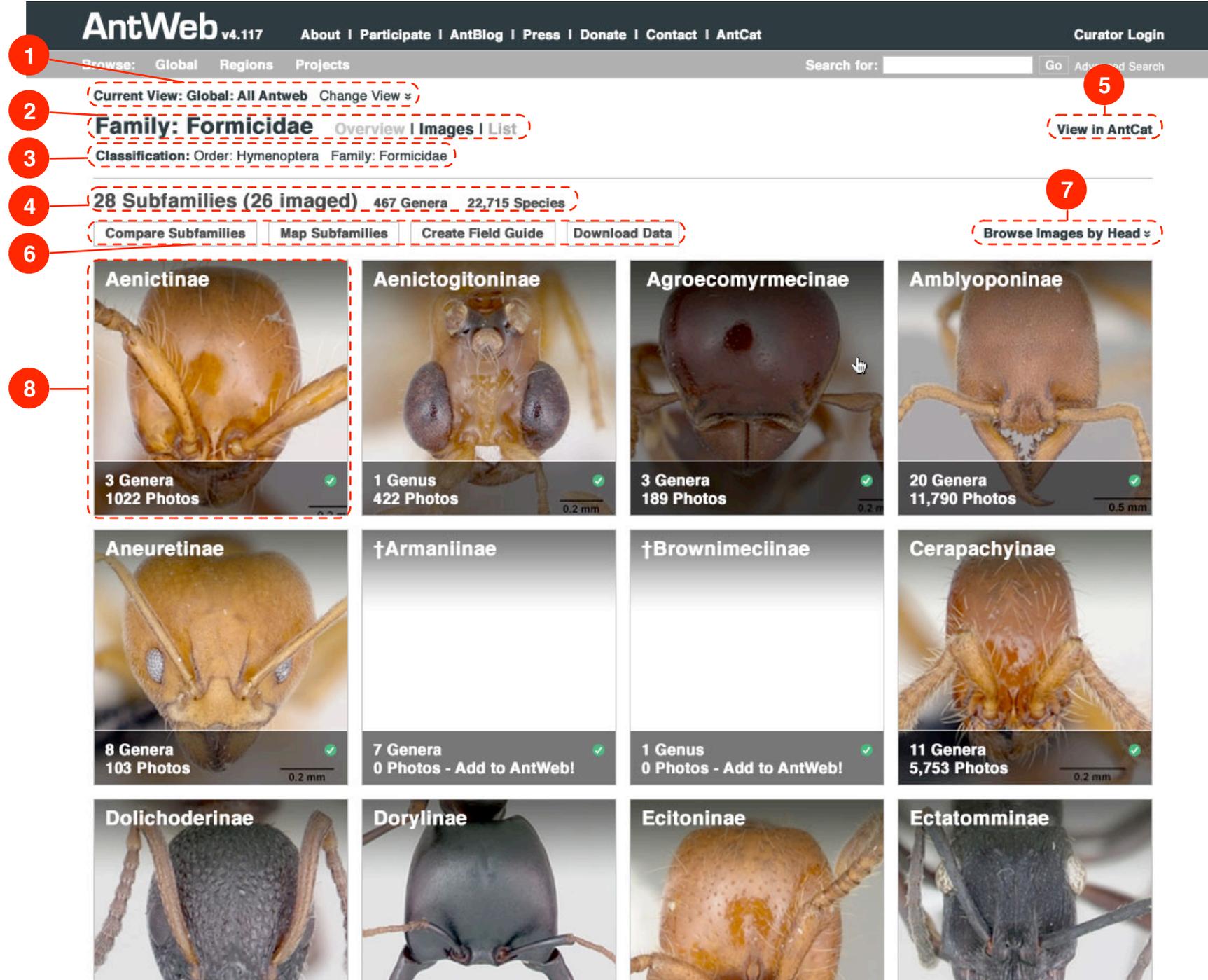
Tools allowing the user to select and compare items, map items, create a field guide, or download the data. See page 10 for example of comparison tool.

7 - Mechanism for Changing Default Thumbnail View

Allows user to change default thumbnail view from head to profile or dorsal. Once changed, is applied to all thumbnail views.

8 - Item Display

Visual representation of given items in the taxon. Displays name, number of sub-items, whether the name is valid, and how many images there are. If there are no photos, a call to action is displayed to encourage people to contribute to AntWeb. Mousing over an item displays full aspect ratio of all thumbnails (head, profile, dorsal, label) (see page 7). Clicking on an item brings the user to the next level in the taxon, unless the user is at the species level, in which case they would go to the Specimen View (see page 12). Clicking on the sub-data (X Genera/Species/Specimens) would bring the user to that level for the given taxon.



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Browsing through the taxonomic hierarchy - List View ★

Browsing through the taxonomic hierarchy, starting from the family level, displaying the subfamilies, as a list. At levels above species, display name, number of items in the next sub-taxon, and number of photos. If possible, display aggregate counts of number of items in each caste (TBD). Once at species level, list is displayed as current new functionality for specimen lists on AntWeb.

1 - List View

Text based list view of all items in this level of the taxonomy. Clicking on an item would bring the user to the next level in the taxonomy in the list view. Clicking on sub-level items would bring them to that listing. Possible variations include:

Subfamily	X Genera	Y Species	Z Photos
Genera	X Species	Y Specimens	Z Photos
Species	X Specimens		Z Photos

For Specimen Listing, display will be as it is with the new specimen listing layout released on AntWeb.

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Current View: [Global](#): [All Antweb](#) [Change View](#) ▼

Family: Formicidae [Overview](#) | [Images](#) | [List](#) [View in AntCat](#)

Classification: Order: Hymenoptera Family: Formicidae

26 Total Subfamilies 467 Genera 22,715 Species

[Compare Subfamilies](#) [Map Subfamilies](#) [Create Field Guide](#) [Download Data](#)

Aenictinae ✓	3 Genera	X Species	1,022 Photos
Aenictogitoninae ✓	1 Genus	X Species	422 Photos
Agroecomyrmecinae ✓	3 Genera	X Species	189 Photos
Amblyoponinae ✓	20 Genera	X Species	11,790 Photos
Aneuretinae ✓	8 Genera	X Species	103 Photos
†Armaniinae ✓	7 Genera	X Species	0 Photos
†Brownimeciinae ✓	1 Genusa	X Species	0 Photos
Cerapachyinae ✓	11 Genera	X Species	5,753 Photos
Dolichoderinae ✓	X Genera	X Species	Y Photos
Dorylinae ✓	X Genera	X Species	Y Photos
Ecitoninae ✓	X Genera	X Species	Y Photos
Ectatomminae ✓	X Genera	X Species	Y Photos
†Formiciinae ✓	X Genera	X Species	Y Photos
Formicinae ✓	X Genera	X Species	Y Photos
Heteroponerinae ✓	X Genera	X Species	Y Photos
Incertae_sedis	X Genera	X Species	Y Photos
Leptanillinae ✓	X Genera	X Species	Y Photos
Leptanilloidinae ✓	X Genera	X Species	Y Photos
Martialinae ✓	X Genera	X Species	Y Photos
Myrmeciinae ✓	X Genera	X Species	Y Photos
Myrmicinae ✓	X Genera	X Species	Y Photos
Paraponerinae ✓	X Genera	X Species	Y Photos
Ponerinae ✓			

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Browsing through the taxonomic hierarchy - Overview Detail ★

This is simply to highlight the introduction of the display of a "Map" link (in **1**), alluded to in annotation **2** on page 4, and how the small map would be displayed (in **2**), alluded to in annotation **3** on page 3.

1 - Map

Provides access to large map for geographic distribution. Clicking on this sends the user to page 9.

2 - Small Map

Small map as a contextual preview for the distribution.

The screenshot shows the AntWeb v4.117 interface. At the top, there is a navigation bar with links for 'About', 'Participate', 'AntBlog', 'Press', 'Donate', 'Contact', and 'AntCat'. Below this is a search bar and a 'Curator Login' link. The main content area displays the taxonomic hierarchy for 'Subfamily: Agroecomymecinae'. The 'Map' link is highlighted with a red dashed box and a red circle labeled '1'. Below the hierarchy, there is a 'Taxonomic History' section with text provided by Barry Bolton, 2013. To the right of the text is a large image of an ant and a small map showing the geographic distribution of the subfamily. The small map is highlighted with a red dashed box and a red circle labeled '2'.

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Browsing through the taxonomic hierarchy - Interaction Detail ★

This is to highlight mouseover interaction with a given thumbnail, allowing the user to see the other thumbnail views, in their full aspect ratio.

1 - Mousing Over a Thumbnail

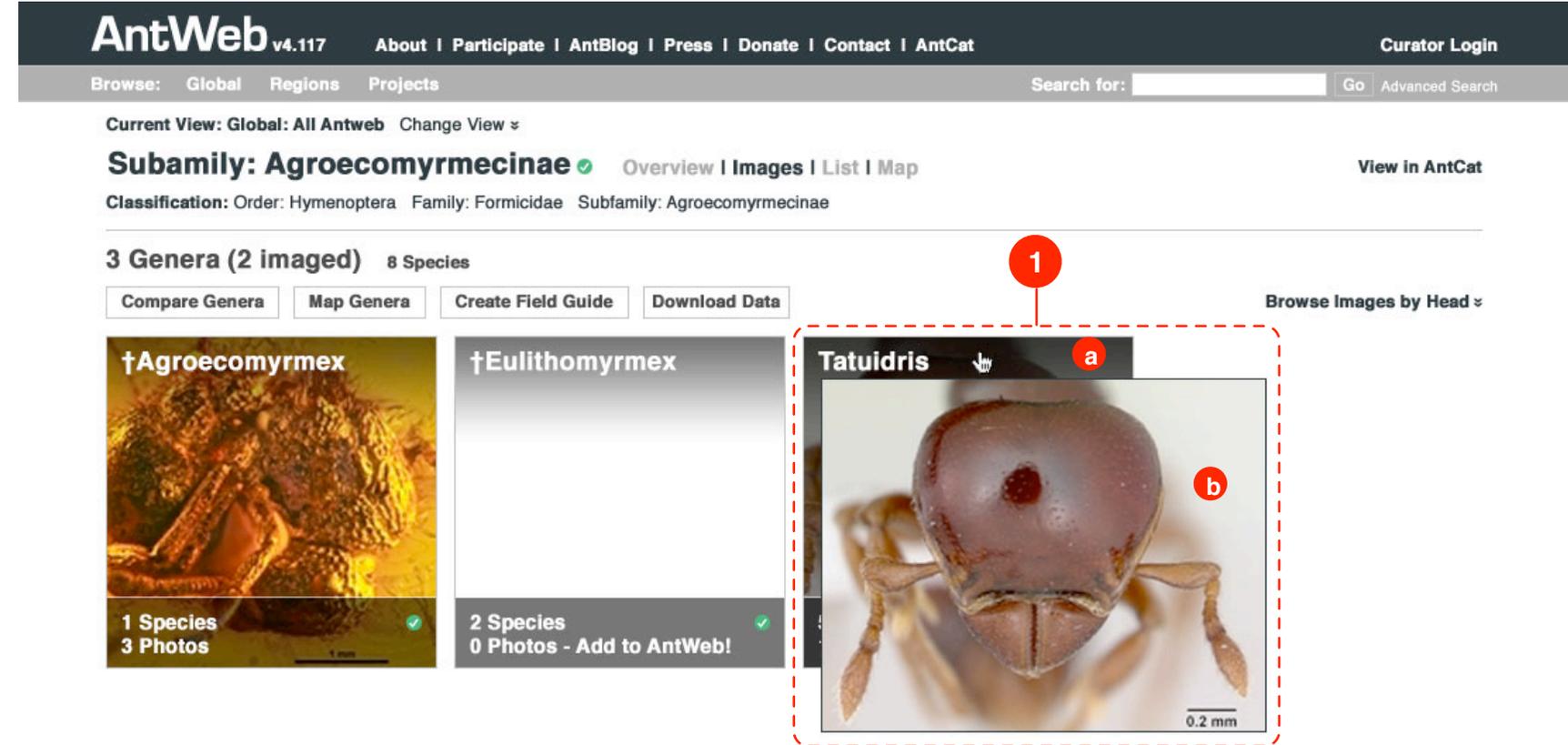
At all levels above a specimen detail page, mousing over a thumbnail image will display an overlay cycling through all available representative thumbnails (head, profile, dorsal, label) in full aspect ratio. At specimen level only displays the specific thumbnail in overlay in full aspect ratio. See page 8 for specific detail. Mousing off of the thumbnail closes the overlay.

1a - Thumbnail Image, with Mouseover

Darker level of opacity applied to thumbnail to create contrast.

1b - Overlay of Representative Thumbnails in Full Aspect Ratio

At levels above specimen detail, cycles through head, profile, dorsal, and label. At specimen detail level, shows specific view.



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Mouseover Interaction Detail ★

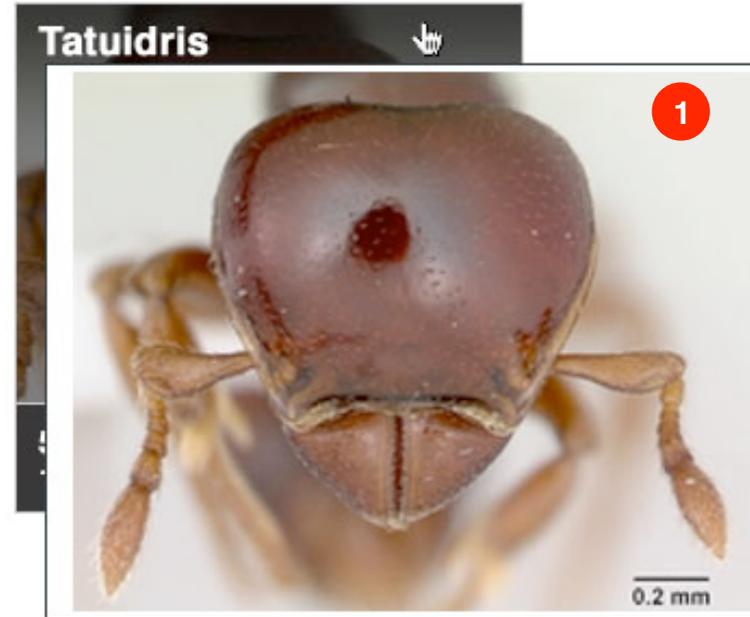
Detail to highlight cycling through the representative thumbnails in an overlay. Each view will display for 2 seconds before cycling to the next. Mousing off of the item hides this overlay.

1 - Head View

2 - Profile View

3 - Dorsal View

4 - Label View



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Browsing through the taxonomic hierarchy - Map View ★

Page when user clicks on "Map". In final design, maps will be larger than this.

1 - Google Maps / Google Earth Toggle

Allows user to toggle back and forth between the Google Maps view of distribution, and the Google Earth view.

2 - Map of Geographic Distribution

Shows map. If user has toggled to Google Earth view, shows that view.



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Choosing images for comparison

Mechanism for choosing images to compare.

1 - Textual Description of Count

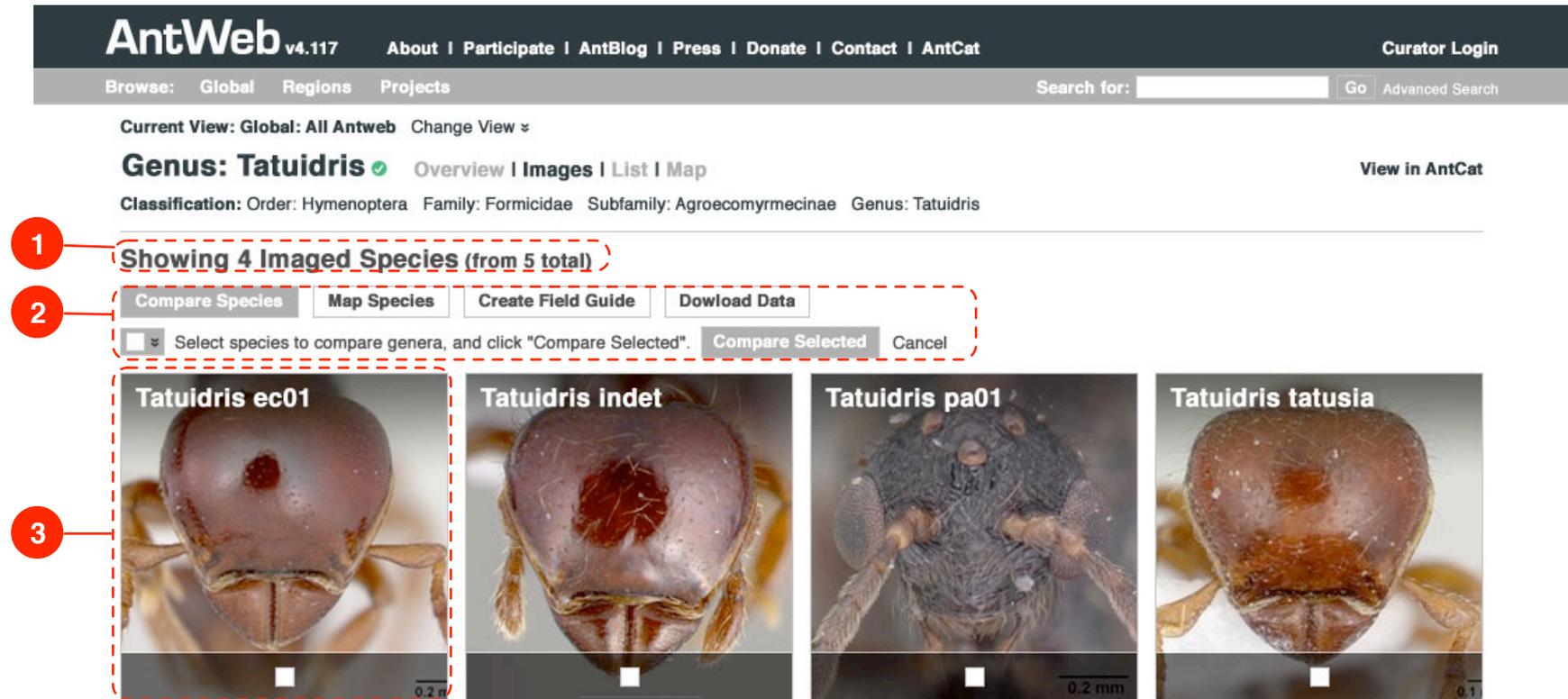
Indicates to user what they are seeing, so as to provide context, and to alleviate confusion in that while there may be more items than are being displayed, they can only compare items that AntWeb has images for.

2 - Comparison Tool

Allows users to compare items selected in 3. Clicking on "Compare Selected" applies comparison to all items selected in 3 (see page 11).

3 - Items Available to Be Compared

Display of items available to be compared, with a checkbox to allow user to select them for comparison via 2.



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Viewing images in comparison tool

Viewing images selected for comparison.

1 - Description of View

Displays description of what is being compared.

2 - Mechanism for Toggling Comparison View

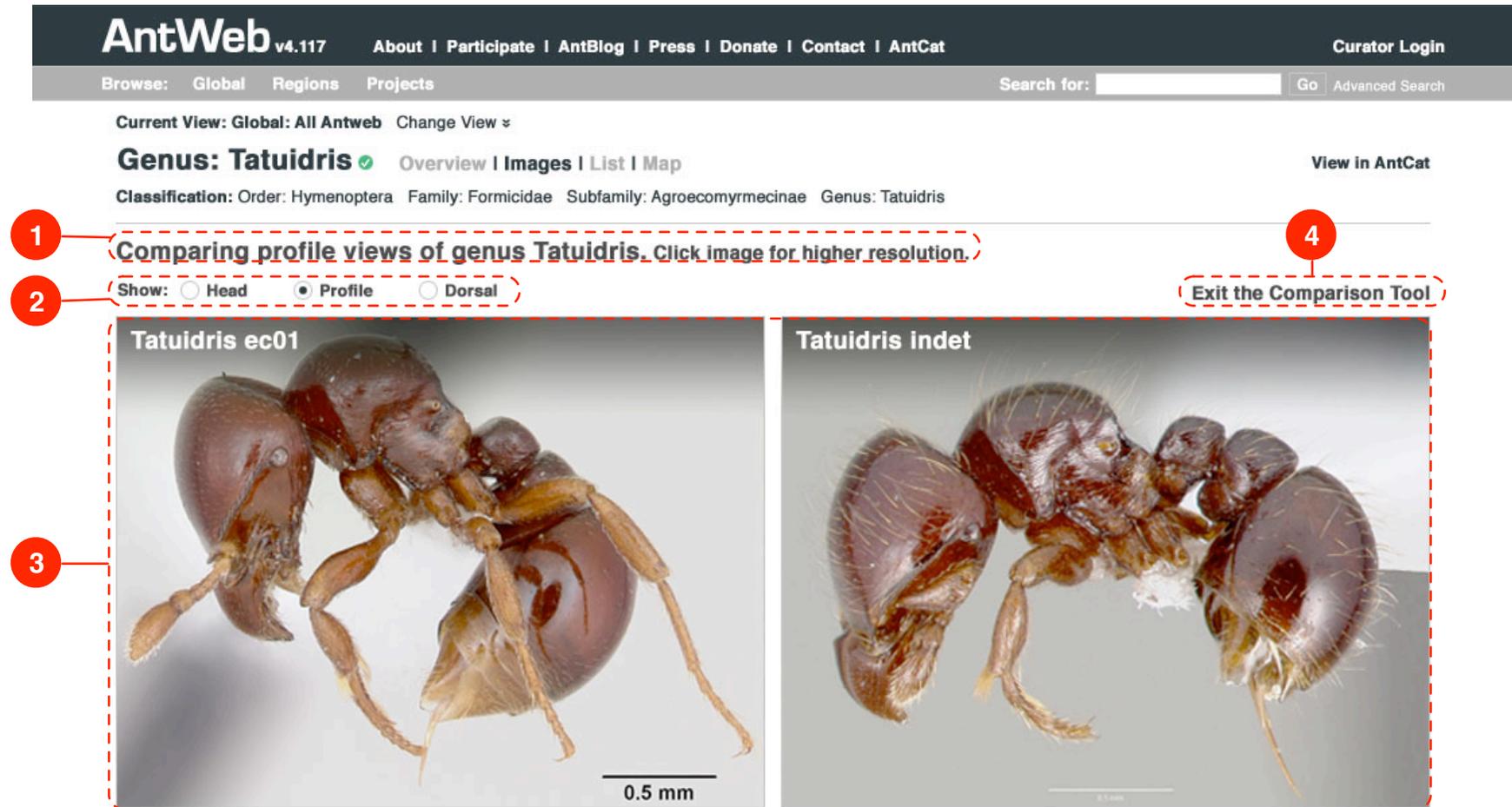
Allows users to toggle what is being shown in 3 between Head, Profile, and Dorsal.

3 - Items Being Compared

Display of items selected for comparison, with view toggled via 2.

4 - Link to Exit Comparison Tool

Clicking on this returns the user to the point at which they chose images for comparison (either that level in the taxon, or the advanced search page), in the appropriate browsing view (be it list or images).



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Specimen View

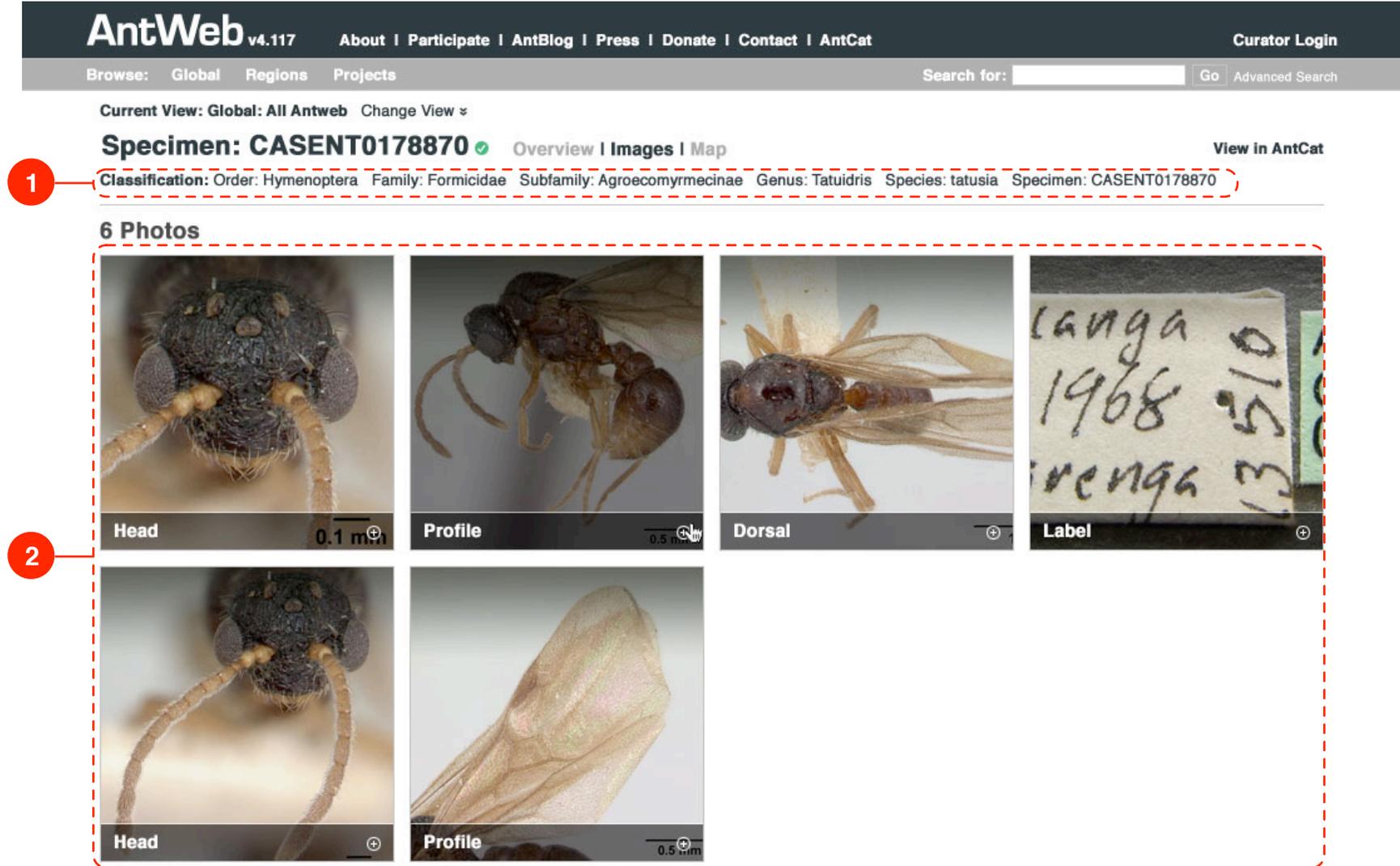
Viewing a specimen.

1 - Classification

As described on page 4, annotation 3, the taxonomy displayed horizontally. Acts as a navigational aid for quickly traversing back up the hierarchy.

2 - Photos of Specimen

Displays available photos of specimen. Clicking on a photo displays larger view (page 13).



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Display of Larger View of Specimen ★

Viewing larger view of a specimen, via the Specimen View (page 12).

1 - Larger Photo Layout

Larger photo, with accompanying data points (specimen, species, photographer, etc), and ability to navigate through all available larger views (head, profile, dorsal, label).

1a - Metadata Display

Which view, date uploaded, photographer, link to view higher resolution.

1b - Back Link

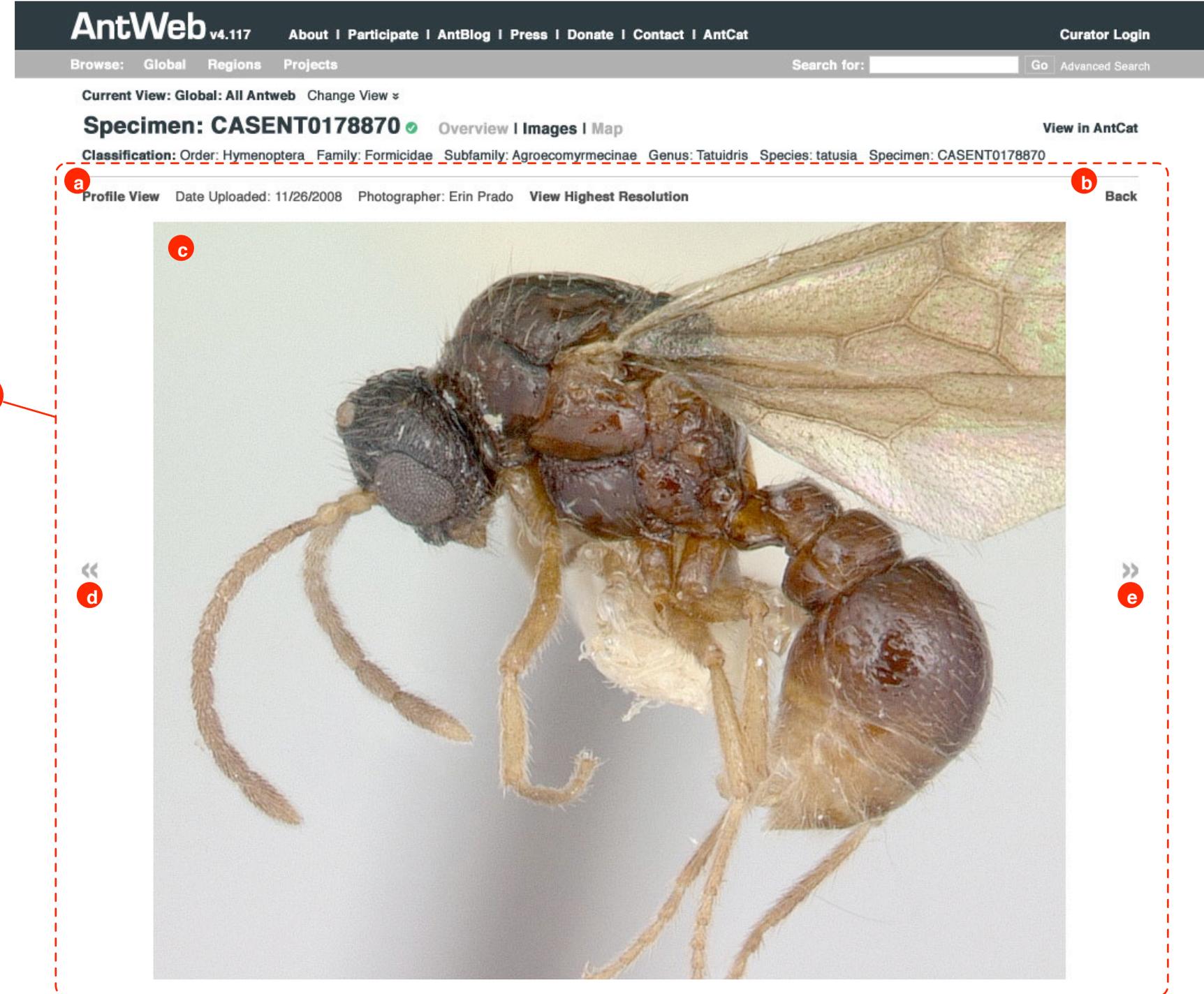
Link to return one to the Specimen View page (page X).

1c - Larger Photo

Full size photo for given view.

1d, 1e - Navigational Controls

Allows user to navigate to the other larger photos for given specimen.



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Region Homepage ★

Now the region homepages can be created even if a curator has not been attached to it, allowing the user to browse through a region in the same way they would the entire taxonomy, including the image view, list view, and map of geographic distribution.

Once a curator has been attached to a region, their content becomes the Overview, as seen on page 15.

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Current View: **Malagasy: Madagascar** [Change View](#) ▾

Madagascar Ants [Overview](#) | [Images](#) | [List](#) | [Map](#) [View in AntCat](#)

8 Subfamilies 51 Genera 1,321 Species

[Compare Subfamilies](#) [Map Subfamilies](#) [Create Field Guide](#) [Download Data](#) [Browse Images by Head](#) ▾

Amblyoponinae 5 Genera 917 Photos 0.5 mm	Cerapachyinae 3 Genera 550 Photos 0.2 mm	Dolichoderinae 4 Genera 693 Photos 0.2 mm	Formicinae 8 Genera 3,110 Photos 0.5 mm
Myrmicinae 20 Genera 8,306 Photos 1 mm	Ponerinae 7 Genera 2,422 Photos 0.5 mm	Proceratiinae 3 Genera 202 Photos 0.5 mm	Pseudomyrmecinae 1 Genus 230 Photos 0.5 mm

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Region Homepage Overview

The curator's description of a given region.

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Current View: **Malagasy: Madagascar** [Change View](#) v

Madagascar Ants [Overview](#) | [Images](#) | [List](#) | [Map](#) [View in AntCat](#)

Brian L. Fisher
There are 418 described species and subspecies currently recorded from Madagascar. This check list contains taxa recorded from Madagascar and its coastal islands (e.g., Nosy Be, St. Marie), but not the neighboring islands of the Indian Ocean: Mauritius, Seychelles, Rodrigues, Aldabra, Farquhar, Chagos, and the Comoro Islands (for these island taxa, see Fisher 1997).

Of the 418 taxa, 379 are endemic to the island of Madagascar, 14 are native but also found outside of Madagascar, and 25 are tramp or invasive species that are thought to be introduced. The level of endemism is high: over 96% of the described native taxa. Though the number of subfamilies and genera is unlikely to increase significantly, the number of species is expected to increase dramatically with additional field surveys and species-level studies.

Recent fieldwork indicates that an estimated two-thirds of the ant species still remain to be described. This high level of discovery of new taxa is clearly demonstrated in a recent revision of the genus *Strumigenys*. This systematic revision describes 70 new species of *Strumigenys* and was based almost entirely on collections from eastern Madagascar, a zone where previous to this study only 2 native *Strumigenys* species were recognized (Fisher 2000). Recent collections from western Madagascar will undoubtedly increase this number.

Tools for taxonomist:
[Measuring Guide to Malagasy ant Genera](#)



Brian L. Fisher and Ant Team
Fisher, B. L. 2003. Ants (Formicidae: Hymenoptera). In *The natural history of Madagascar*. S. M. Goodman and J. P. Benstead (eds). Pp. 811- 819. University of Chicago Press.

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AntWeb Homepage

Rethinking the AntWeb homepage to showcase imagery and depth of data.

1 - Current Statistics

Making the statistics more prominent on the page.

2 - Recent Activity

Highlighting recently added images and description updates.

3 - High Resolution Background Image

To highlight the fact that AntWeb has high resolution imagery, each day display a different, new image in the background.

4 - Subfamily Slide Carousel

Again, to showcase AntWeb's depth of imagery, a slideshow carousel that the user can quickly see the imaged subfamilies, scrolling left and right. Clicking on a subfamily would bring the user into visual browsing mode for that subfamily.

5 - Featured Curators

Displaying the featured curators.

