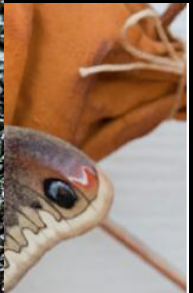


Merlin

What happens when everyday people build a bird ID tool?



Yellow-throated Warbler



- Everything
- Images
- Videos
- More

Ithaca, NY
 ▾ Change location

All results
 Sites with images
 ▾ More search tools

Something different
 american redstart
 louisiana waterthrush
 ovenbird
 wood thrush
 prairie warbler

prothonotary warbler X Search
 prothonotary warbler I'm Feeling Lucky »
 prothonotary warbler **song**
 prothonotary warbler **range**
 prothonotary warbler **nest box**
 prothonotary warbler **alger hiss**

About 75,500 results (0.32 seconds) Advanced search

[Images for prothonotary warbler](#) - Report images



Prothonotary Warbler - [Wikipedia, the free encyclopedia](#)

The **Prothonotary Warbler** (*Protonotaria citrea*) is a small songbird of the New World warbler family. It is the only member of the genus *Protonotaria*. ...

References - External links - Further reading - Book
en.wikipedia.org/wiki/Prothonotary_Warbler - Cached - Similar

Prothonotary Warbler, Life History, All About Birds - Cornell Lab ...

Learn how to identify **Prothonotary Warbler**, its life history, cool facts, sounds and calls, and watch videos. A brilliant yellow-orange bird of southeastern ...

fody.ornith.cornell.edu/guide/Prothonotary_Warbler/lifehistory - Cached

Prothonotary Warbler, Identification, All About Birds - Cornell ...

Learn how to identify **Prothonotary Warbler**, its life history, cool facts, sounds and calls, and watch videos. A brilliant yellow-orange bird of southeastern ...

www.allaboutbirds.org/guide/Prothonotary_Warbler/id - Cached - Similar

Prothonotary Warbler: Bird of the Month - Smithsonian Migratory ...

The **prothonotary** is unique among the eastern **warblers** because it nests in holes in trees.

Abandoned downy woodpecker holes are the most common nest sites, ...
nationalzoo.si.edu/scbv/.../default.cfm?bird=Prothonotary_Warbler - Cached

Prothonotary Warbler - National Audubon Society - Watchlist

In the shade of America's wooded swamps and river bottom forests, the **Prothonotary Warbler** is a dash of gold. Its common name refers to Catholic notaries ...

web1.audubon.org > ... > State of the Birds > Watchlist - Cached - Similar

Prothonotary Warbler - Whatbird.com

4 posts - 3 authors

Prothonotary Warbler: Medium-sized warbler with olive-green back and blue-gray wings and tail. Head, neck, and underparts are vibrant yellow and the ...

identify.whatbird.com/.../Prothonotary_Warbler.aspx - Cached - Similar

The Prothonotary Warbler

Why A **Prothonotary Warbler**? There were no commies here! Obama - How Far To the Left Is Obama? Obama's Communist Ties - Obama's Communist Czars ...

prothonotarywarbler.com/ - Cached - Similar

Prothonotary Warbler

Best observed in its habitat from a canoe. Forages for insects in bushes and low willow trees often over water.

www.50birds.com/BPProthonotaryWarbler.htm - Cached - Similar

Instant is on ▾

Also try
[blue winged warbler](#)
[yellow warbler](#)
[prothonotary warbler alger hiss](#)
[ovenbird](#)
[yellow throated warbler](#)

See your ad here >

The “search” for ID help

“small bird with black stripe”

“orange birds”

“ID of sparrow with red crown”

“smoky gray bird with black eyes and black tail”

“large hawk with white tail patch”

“plump small bird with long straight bill”

“black bird with pointy head”

Key to the Northern Conifers

1. Crowns small, or if large then definitely cone-shaped	
2. Crown broadly conical, usually rounded tip, branches not prominent	Cedar
2. Crowns have a pointed top, or coarse branching, or both	
Crowns narrow, often cylindrical, trees frequently grow in swamps	Swamp-type black spruce
Crowns conical, deciduous, very light toned in fall, usually associated with black spruce	Tamarack
Crowns narrowly conical, very symmetrical, top pointed, branches less prominent than in white spruce	Balsam fir
Crowns narrowly conical, top often appears obtuse on photograph (except northern white spruce), branches more prominent than in balsam fir	White spruce, black spruce (except swamp type)
Crowns irregular, with pointed top, has thinner foliage and smoother texture than spruce and balsam fir	Jack pine
1. Crowns large and spreading, not narrowly conical, top often not well defined.	
3. Crowns very dense, irregular or broadly conical	
4. Individual branches very prominent, crown usually irregular	White pine
4. Individual branches rarely very prominent, crown usually conical	Eastern hemlock
3. Crowns open, oval (circular in plan view)	Red pine

From Canada Department of Forestry.

Key-based Approach

Merlin

- Dynamic Q&A
- Handles “noisy data”
- Gets better with use

20Q in action

20Q the neural-net on the internet.
net

Play **Blog** **Game FAQ** **Other Games**

Play 20Q
About Us
Products
More ...

Available on the **App Store**

"Intriguing, entertaining and downright spooky."
The Tech. Museum of Innovation

games played online
78,845,060

I Can Read Your Mind!!
PLAY

Think of something and 20Q will read your mind by asking a few simple questions. The object you think of should be something that most people would know about, but not a proper noun or a specific person, place, or thing.

Click the **?** in the upper right corner for help.

Q1. Is it classified as Animal, Vegetable or Mineral?
Animal, Vegetable, Mineral, Other, Unknown

Suggestions

If you would like some suggestions of what to think about, 20Q recommends the following:

20Q is confused about . . .
a sextant, bile (fluid secreted by the liver), a magician, a hyrax (African mammal), a cousin.

20Q/5.99z06, WebOddity/1.18m © 1988-2009, 20Q.net Inc., all rights reserved



Start Over

Photo Upload

Feedback

Where did you see the bird?

(for example: *Sapsucker Woods, Ithaca, NY 14850*)



Back

Continue

Progress



click on an answer below to edit it

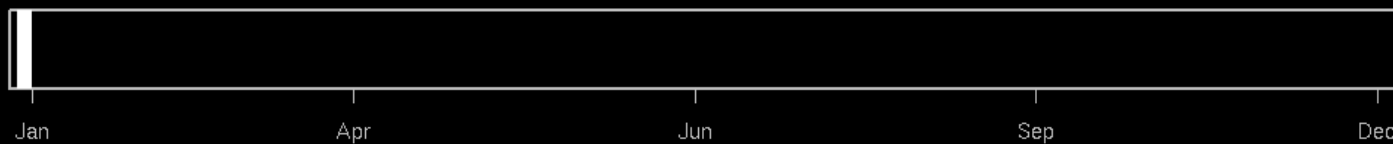
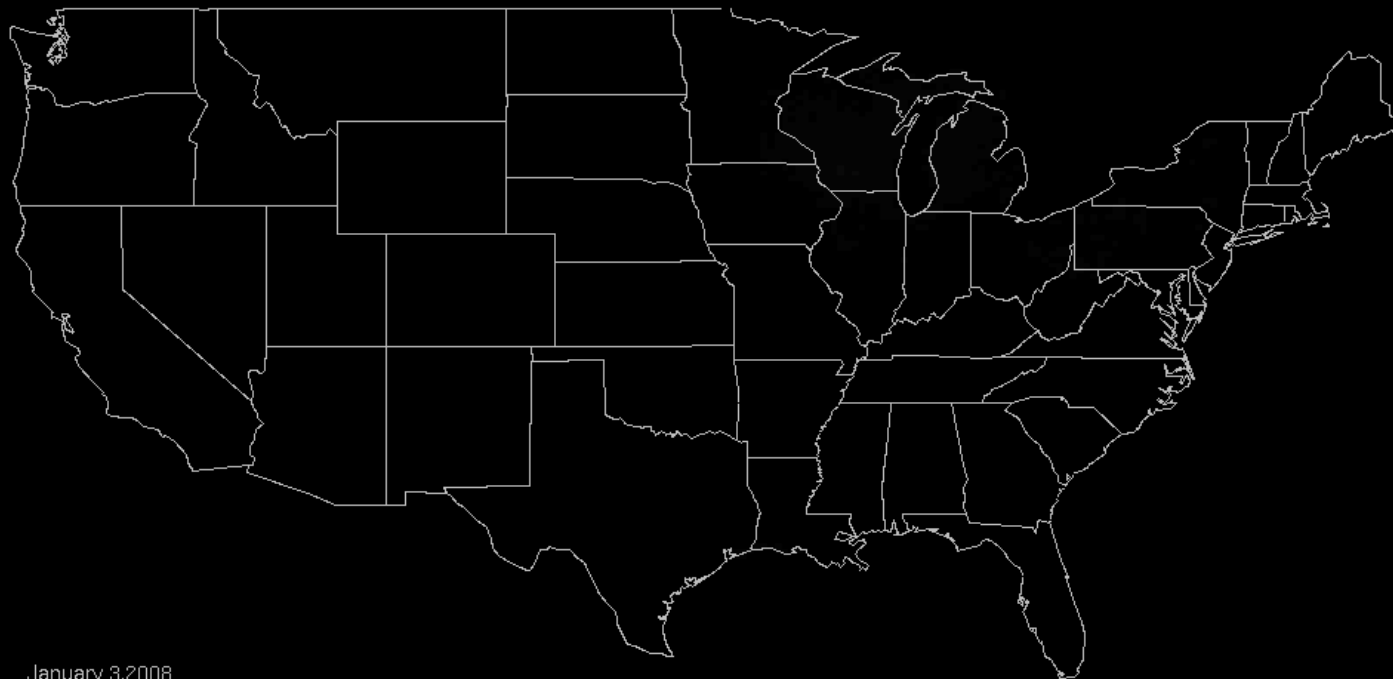
1. When bird was seen
June 10, 2011

When & Where

1 species (+0 other taxa)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flammulated Owl (<i>Otus flammeolus</i>)				---	-----	-----	-----	---				



eBird



All About Birds **LAPS**

▶ Activities

3 of 18 questions [Exit](#)

Select the bird's bill length.



© Kevin Bolton

[VIEW LARGER](#)

The bird's bill is...



Shorter than the head

Equal to length of head

Longer than the head

[← Back](#) [Not sure](#) [Next](#)



All About Birds **LABS**

▶ Activities

11 of 18 questions | [Exit](#)

Click on the belly in the photo.



Click box if feature **Not Visible** in photo

Look at the **diagram above**, then **click on the belly** to show **Merlin** where the belly is located in the photo at left.

◀ Back

Next ▶



Start Over

Photo Upload

Feedback

Has Merlin correctly identified your bird?

Check your answers in Progress area to the right. You can click to edit answers.

91% chance it is a **Hooded Oriole**



Yes

Not yet ▶

RESULTS VIEWER

Scott's Oriole, Male



Bullock's Oriole, Male



Yellow-headed Blackbird,
Male



Western Tanager, Male



Progress



click on an answer below to edit it

1. When the bird was seen

June 10, 2011

2. Where the bird was seen

Vetana Canyon, Tucson, AZ

3. Bird size

Robin-sized

4. Bird Group

Songbirds and More

5. Bird Shape

Blackbirds and Orioles

6. Main Colors

Yellow and Black

**How do novice
bird watchers
describe birds?**



Front-end

Findings

Novice Birders

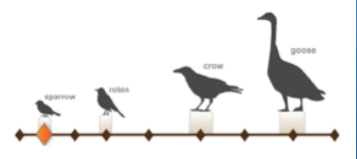


Diagram illustrating bird size progression. A horizontal line with diamond markers shows four birds of increasing size: sparrow, robin, crow, and goose. The word "SIZE" is written to the right of the diagram.

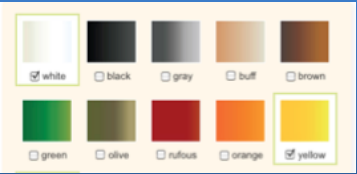


Diagram illustrating bird color selection. A grid of color swatches includes white, black, gray, buff, brown, green, olive, rufous, orange, and yellow. The word "COLOR" is written to the right of the grid.

Expert Birders



Diagram illustrating bird shape variations. Three small bird silhouettes are shown in different poses. The word "SHAPE" is written to the right of the silhouettes.


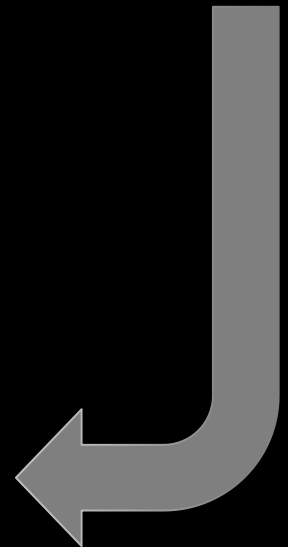
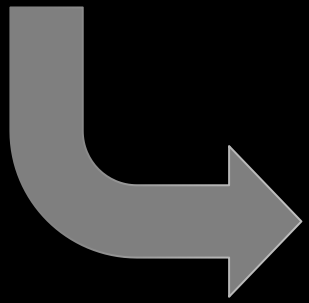
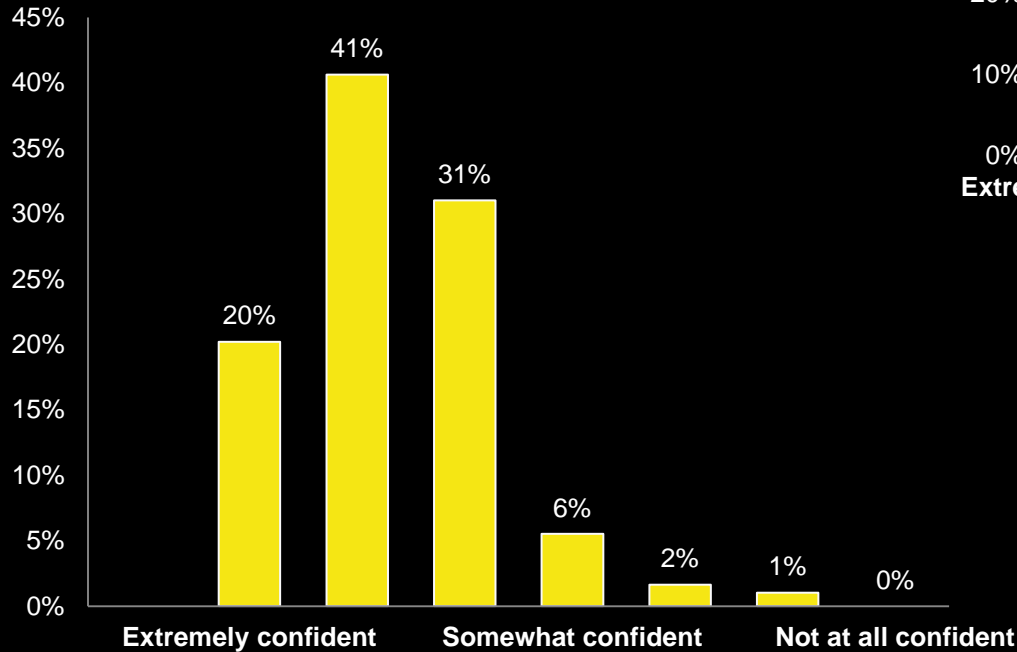


Diagram illustrating bird groups and biodiversity. A grid of seven bird silhouettes is shown. The text "BIRD GROUPS" and "BIODIVERSITY" is written to the right of the grid.

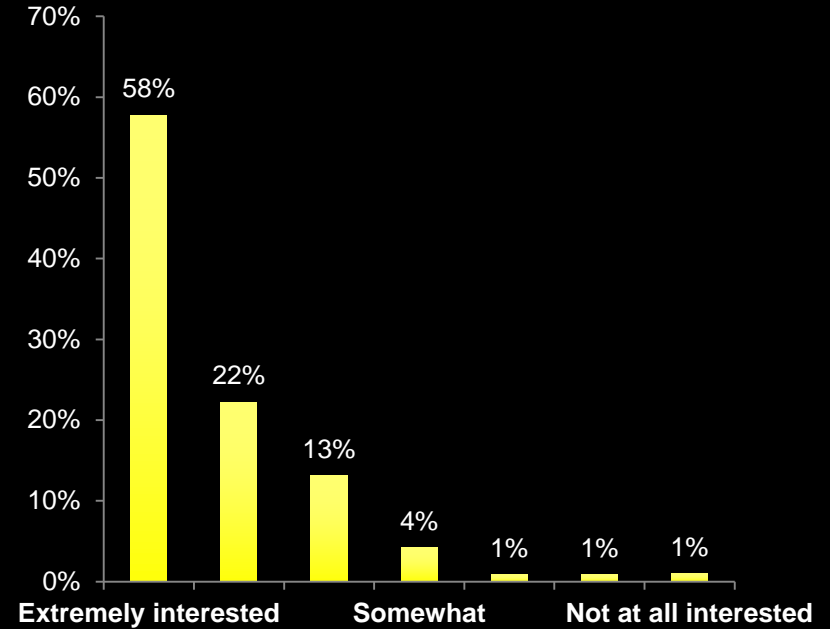


Formative Testing

Confidence Level Using MMB



Interest in completing another session of MMB



Usability Testing of Mark My Bird
In-person think aloud & interview (n=28)
Web based survey (n = 540)

Unintended Outcomes

“The questions guide the user through a very complete species observation.”

“A great way to learn what is important in reviewing birds descriptions, and how to see a bird-by sections!”

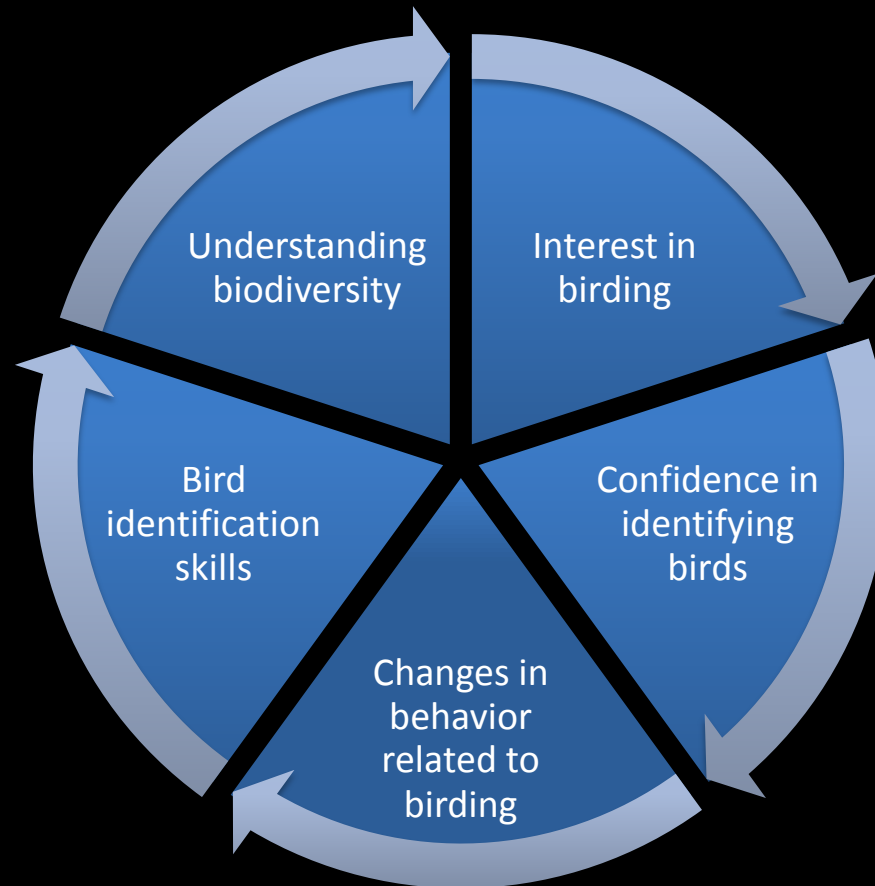
“FUN!!! Helps me to hone in on each defining characteristic of the bird.”

“Learning how to be more organized when describing characteristics of a bird for identification.”

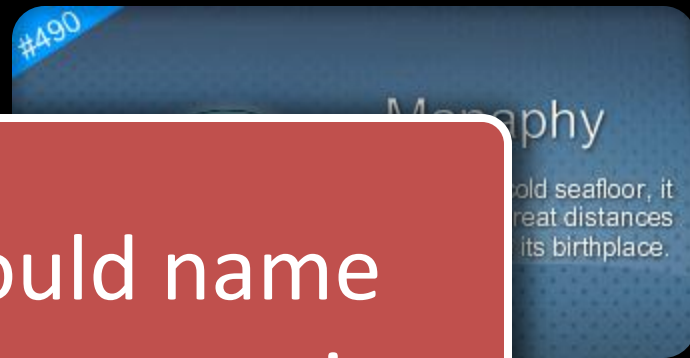
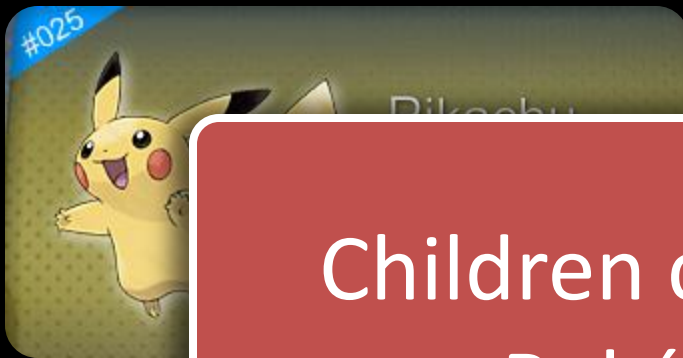
Summative

Questions

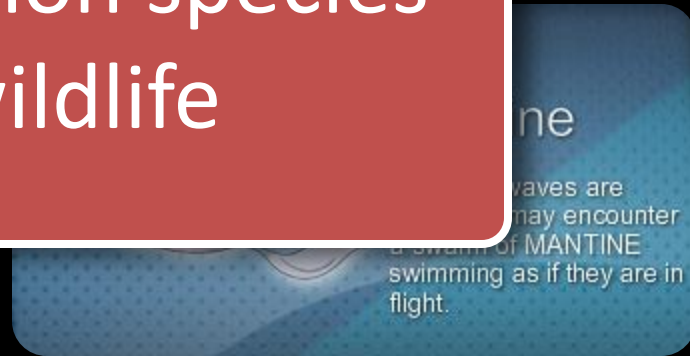
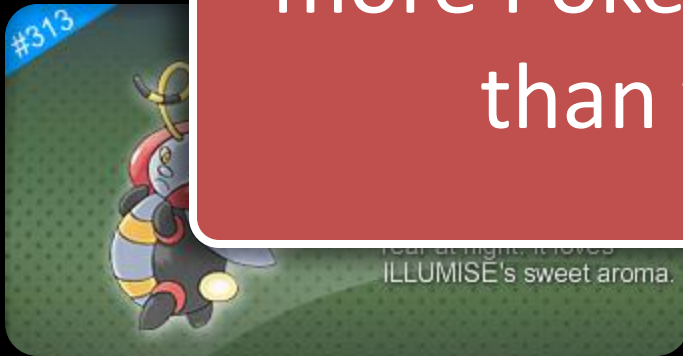
Are there changes in....



Why conservationists should heed



Children could name
more Pokémon species
than wildlife





undescribed species



Savannah Sparrow



Yellow-headed Blackbird



Sandhill Crane

Black Skimmer



Blackburnian Warbler

At your fingertips...



Mobile devices

Classrooms

Museums

Butterflies

Plants...

The **Cornell** Lab of Ornithology



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