

Audubon Butterfly Garden and Insectarium

A place where history and tradition
meet diversity and wonder

Steven Nichols
Jayme Necaie
Anthony Cognato



Overview

- Where it all started
- Finding the ideal location
- Dedicated people who share the vision
- Animals, exhibits, and entertainment
- Visitors



**Overcoming
obstacles**

Ron Forman

President and
CEO of the
Audubon



U.S. Custom House



Started construction in 1848



Audubon Insectarium

Audubon Butterfly Garden and Insectarium

Fly into Fun



ENTRANCE

Jayme Necaise

Director of
Animal and
Visitor
Programs





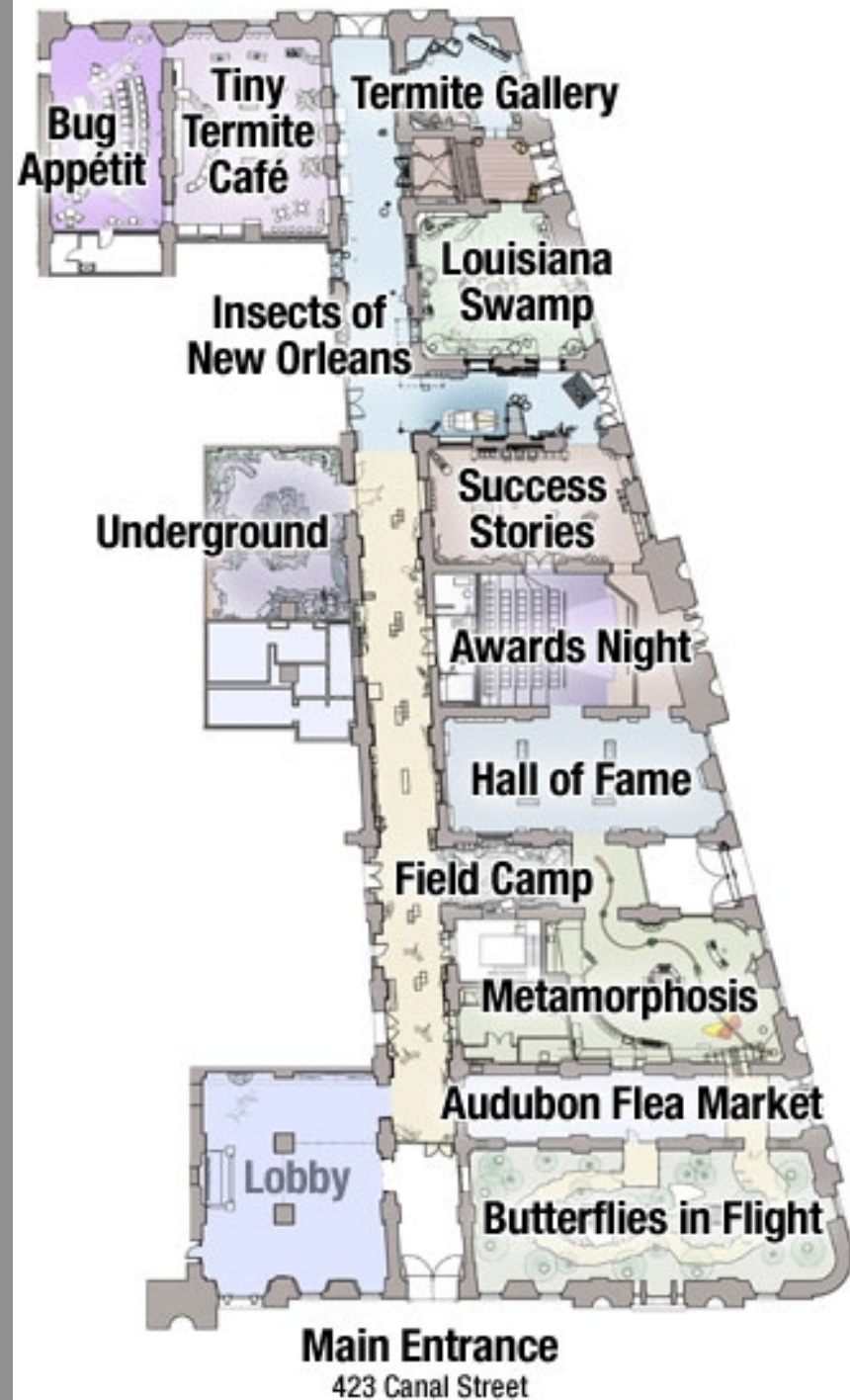
Zack
Lemann

Manager of
the collection





Floor plan





Audubon Insectarium

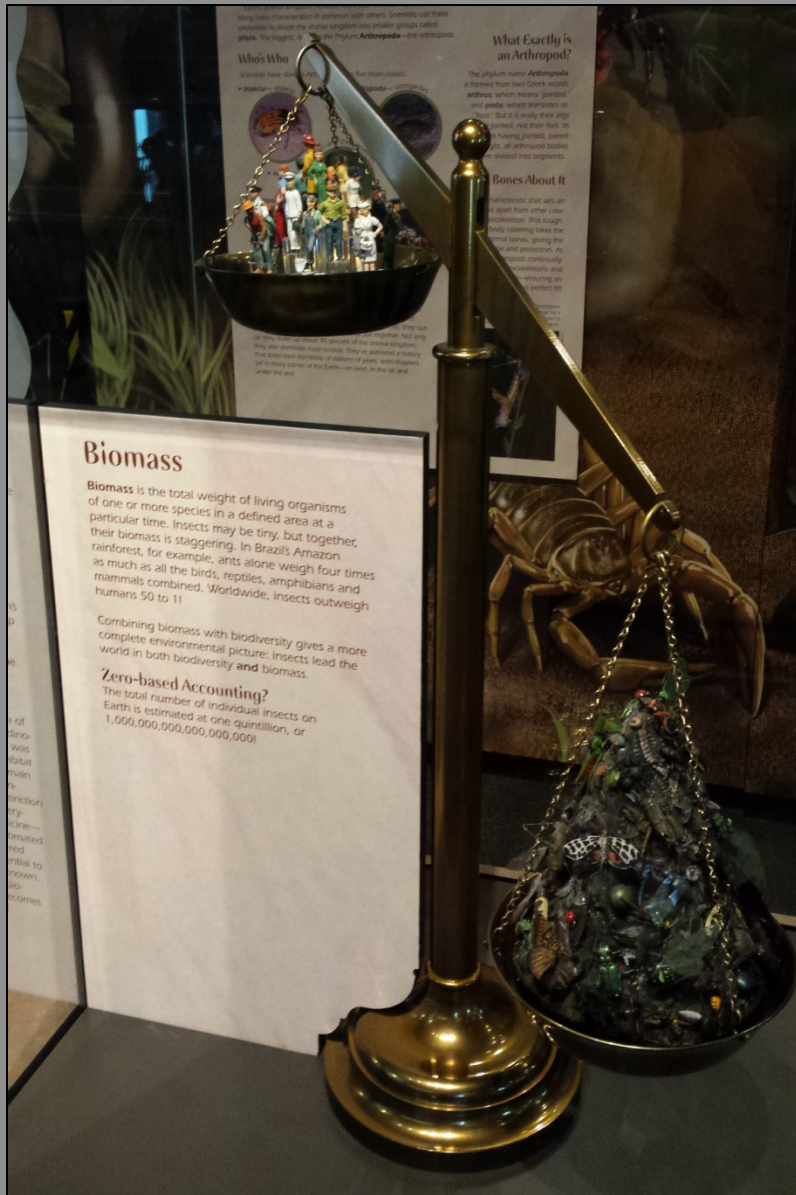




Opening **Infestivities**
Welcome

Lady Spindle Weevil
The lady spindle weevil is a small, dark beetle with a distinctive white stripe running down its back. It is a common pest of stored grains and other food products. The weevil's long snout is used to bore into the grain, where it lays its eggs. The larvae that hatch from these eggs are also pests, as they feed on the grain and can cause significant damage. The weevil is a member of the Curculionidae family, which includes many other species of weevils.

CLYDEBIC



Biomass

Biomass is the total weight of living organisms of one or more species in a defined area at a particular time. Insects may be tiny, but together, their biomass is staggering. In Brazil's Amazon rainforest, for example, ants alone weigh four times as much as all the birds, reptiles, amphibians and mammals combined. Worldwide, insects outweigh humans 50 to 1!

Combining biomass with biodiversity gives a more complete environmental picture: insects lead the world in both biodiversity **and** biomass.

Zero-based Accounting?

The total number of individual insects on Earth is estimated at one quintillion, or 1,000,000,000,000,000,000!

Many birds' characteristics in common with others. Scientists use these similarities to divide the animal kingdom into smaller groups called groups. The biggest is the phylum **Arthropoda**—the arthropods.

Who's Who

Scientists have divided the animal kingdom into groups called phyla. The biggest is the phylum **Arthropoda**—the arthropods.

Arthropods have three main classes: **Insecta** (insects), **Arachnida** (arachnids), and **Crustacea** (crustaceans).

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What Exactly is an Arthropod?

The phylum name **Arthropoda** is derived from two Greek words: **arthro**, which means "jointed" and **podia**, which translates as "feet." So it is a living thing that is jointed, not three feet, as in the word "triped." Arthropods have jointed, paired legs. All arthropod bodies are divided into segments.

Bones About It

Arthropods that sets an arthropod apart from other invertebrates. This tough, flexible covering covers the external bones, giving the arthropod protection. As arthropods grow, they shed their exoskeletons and re-growing an exoskeleton perfectly fit.

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Biodiversity

When scientists talk about living things in an environment, they use the words **biomass** and **biodiversity**. What do these terms mean? More importantly, what do they mean to us?

Biodiversity expresses numbers of species. It measures variety—the total number of different species in a given ecosystem.

A World Based on Bugs

This pyramid represents the vast diversity of Earth's animals. Vertebrates (including humans) may top the model, but we hardly stack up against insects. Claiming more than 75 percent of known animal species, insects are clearly the foundation of the animal world.

Losing Diversity

Scientists warn that Earth is in an era of the greatest biodiversity loss since dinosaurs went extinct. While Nature was to blame in prehistoric times, habitat loss caused by humans is the main reason for today's decline. Unchecked, it can force the extinction of species that give us everything from food to medicine—not to mention the estimated millions of undiscovered species whose potential to help us is still unknown. In this context, biodiversity loss becomes very personal.

that dates back hundreds of mil
set in every corner of the Earth
under the sea

Vertebrates
1,000 species

Non-arthropod
Invertebrates
104,000 species

Non-Insect Arthropods
12,000 species

Insects - 800,000 species

Biomass

Biomass is the total mass of one or more species of a particular time. In a rainforest, for example, the biomass is as much as all the mammals combined, humans 50 to 11

Combining biomass with complete environmental world in both biodiversity

Zero-based Accounting

The total number of individual Earth is estimated at one quintillion, 1,000,000,000,000,000,000









NEW ORLEANS
RENAISSANCE

Pharmacy
Pharmacies

Pharmacy
Pharmacies
Pharmacies
Pharmacies



HIT
IT,
BOYS!

1890s - JAZZ IS INVENTED IN NEW ORLEANS,
INSPIRED BY SYNCOPATED ROACHES CRAWLING
ACROSS THE BANDSTAND.

UPTOWN,
DOWNTOWN,
BACKO'TOWN

Don't miss the
COOKING SHOW!

Next Show:

1:00 PM

Today's Special:

Red Beans
& YIKES

and
Washington State
WAXWORMS

Vomit Slurpers

Flies feed by barfing out saliva to dissolve solid foods to dissolve food.

The food is absorbed through their body wall. They taste using their feet and legs, not their human tongues. Flies are 10 million times more sensitive to sugar.



FACTOID
Flies pee out 4.5 microliters of urine every day.

FACTOID
Some doctors and hospitals use fly maggots to treat skin and bone infections. Maggots contain a natural chemical in their gut that kills bacteria.

Forensic fly maggots are used to determine the time of death.

FUN FACT
Some flies are so lucky, people throw them out for birthday cake. A recipe that includes mashed houseflies was published on a food menu in 1901. Nope, it didn't work.

Flies are not picky eaters! They'll eat anything, from garbage to dookie to birthday cake. The tiny hairs and sticky pads on their feet and legs pick up disgusting stuff such as bacteria and germs. A study of 414 houseflies found an average of 1,250,000 bacteria on a fly body. Most of the freeloaders are harmless. But when a fly lands in your soup, you can't be sure where it has been or what it has eaten.


maggots





HAPPINESS OF ALL SORTS


Informational panel with images and text.



More than just
fabulously beautiful,
butterfly and moth colors are
functional, too. They can help
individual species identify their com-
mates, ensuring successful courtship.
Color can also provide protection
from predators—warning of noxious
taste or enabling camouflage.



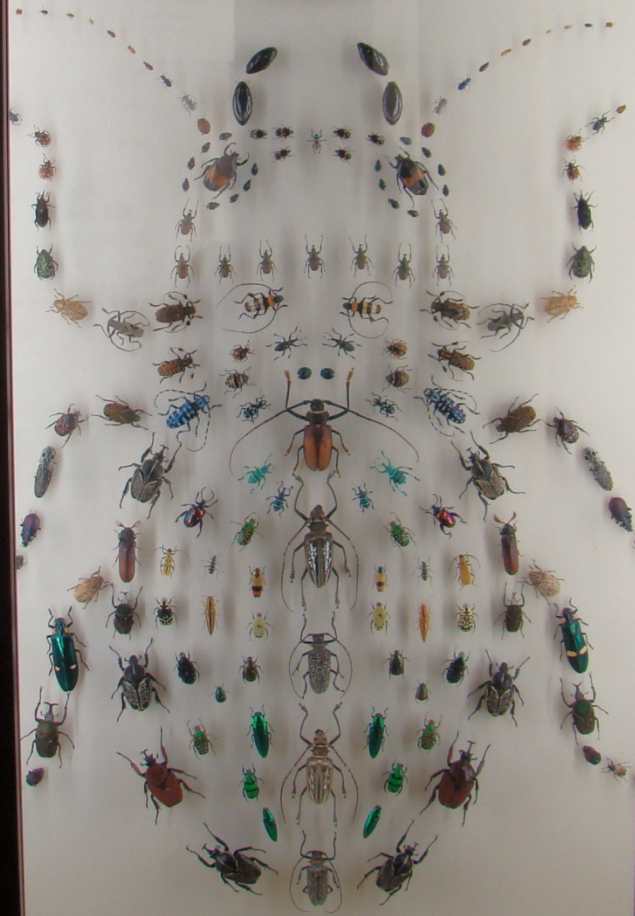
Colors of Beauty



In the art of nature,
butterflies and moths are
clearly the preferred canvas.
Painted from an infinite color
palette, their vivid wings create
an unrivaled art show...
in the sky!

Divine Design: Beetles

Bothered by the thought of crawling beetles?
Shift your focus to their amazing forms, and you
quickly learn to appreciate these wonderful bugs.
Beetles embody all the principles of great design—
sensational color, striking patterns and strong
functionality blended with artistic flair!





Our planet is filled with bugs that boast amazing shapes and patterns, and the extraordinary specimens in these cases hail from far corners of the globe. We hope you enjoy this mini "expedition" around the astounding world of bugs!









I ATE a BUG



AT THE
AUDUBON
INSECTARIUM!

The visitors

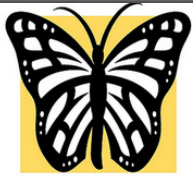
- 175,000 - 200,000 (annually)
- Locals
- Tourists
- On foot



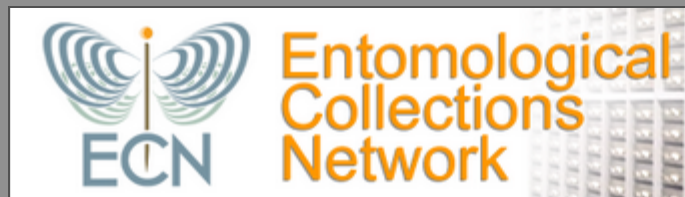


Acknowledgements

- Jayme Necaie
- Anthony Cognato
- The ECN



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A Facility of Audubon Nature Institute



Questions



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