



Name: \_\_\_\_\_

Teacher: \_\_\_\_\_

Period: \_\_\_\_\_

## What Can Seabird Barf Tell Us? Worksheet: Seabird Ecology

Midway Atoll is located in the north south (circle one) \_\_\_\_\_ Ocean in the \_\_\_\_\_ Islands.

Midway Atoll is famous for its \_\_\_\_\_ history, beautiful \_\_\_\_\_, and millions of \_\_\_\_\_, particularly the \_\_\_\_\_, or goonies.

Fledging = \_\_\_\_\_

Albatrosses are currently most threatened by

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Adult albatrosses feed their chicks by \_\_\_\_\_. They usually eat \_\_\_\_\_, \_\_\_\_\_, and more.

Bolus = \_\_\_\_\_

Items found in a bolus:

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

Research Question:

\_\_\_\_\_  
\_\_\_\_\_

Hypothesis:

\_\_\_\_\_  
\_\_\_\_\_



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## What Can Seabird Barf Tell Us? Worksheet: Seabird Ecology

Midway is located in the north south \_\_Pacific\_\_ Ocean in the \_\_Northwestern\_\_  
\_\_Hawaiian\_\_ Islands.

Midway is famous for its \_\_Navy/military\_\_ history, beautiful \_\_coral reefs\_\_, and millions of  
\_\_(sea)birds\_\_, particularly the \_\_albatrosses\_\_, or goonies.

Fledge = \_\_bird chicks leave the nest to fly on their own and become independent\_\_\_\_\_

[In order to see where animals go when we can't see them, scientists use \_\_satellite\_\_  
\_\_tags\_\_. They show that albatrosses feed \_\_all over the North Pacific ocean\_\_. (exclude if  
time is short)]

Albatrosses are currently most threatened by

- longline fishing (longline)
- lead poisoning → droop-wing syndrome
- introduced mammal predators

Adult albatrosses feed their chicks by \_\_throwing up\_\_. They usually eat \_\_squid\_\_, \_\_fish  
eggs\_\_, and more.

Bolus = \_\_compact mass of indigestible material regurgitated (thrown up) by seabird chicks just  
before fledging\_\_

Items found in a bolus:

- Plastic
- Squid beaks
- Fishing nets & lines
- Rocks (often pumice)
- (also sometimes glass, other things)

Research question:

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## What Can Seabird Barf Tell Us? Worksheet: Impacts of Marine Debris

Marine debris = \_\_\_\_\_

\_\_\_\_\_

Most marine debris is plastic because it is \_\_\_\_\_ and

\_\_\_\_\_.

Major impacts of marine debris:

- Ingestion = \_\_\_\_\_
- Entanglement = \_\_\_\_\_
- \_\_\_\_\_ = fishing nets continue to catch fish long after being abandoned
- Transport of \_\_\_\_\_ species
- Human health risks
- Economic impacts

“Garbage Patches” = \_\_\_\_\_

What are three ways you can help reduce plastics and marine debris?

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

What are two things you learned from this activity?

- \_\_\_\_\_
- \_\_\_\_\_



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## What Can Seabird Barf Tell Us? Worksheet: Impacts of Marine Debris

Marine debris = \_\_any solid material made by humans that is disposed of in the ocean\_\_

Most marine debris is plastic because it is \_\_strong, flexible, lightweight (floats), and durable – doesn't biodegrade\_\_.

Major impacts of marine debris:

- ingestion = \_\_organisms eating marine debris, which can cause internal injury, starvation, and even death\_\_
- entanglement = \_\_organisms getting tangled in fishing nets or other marine debris, which can cause injury, suffocation, and death\_\_
- \_\_ghostfishing\_\_ = fishing nets continue to catch fish long after being abandoned
- transport of \_\_exotic\_\_ species
- human health risks
- economic impacts

“Garbage Patches” = \_\_areas in the ocean where trash and debris accumulate due to ocean currents\_\_ (consider excluding if time is short)

What are three ways you can help reduce plastics and marine debris?

- Reduce, reuse, recycle
- Put your cash in trash cans
- Pick up trash
- Conduct a clean-up
- Support legislation about marine debris
- Encourage your family and friends to help keep beaches & oceans clean!



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## What Can Seabird Barf Tell Us? Datasheet: Bolus Dissection

Team members: \_\_\_\_\_

Date of dissection: \_\_\_\_\_

Bolus #: \_\_\_\_\_ Species (if known): \_\_\_\_\_ Location: \_\_\_\_\_ Date of collection: \_\_\_\_\_

Category	Count	Mass (g)
<b>Natural Items</b>		
Squid beaks		
Unidentified plant fragments		
Rocks		
Other:		
<b>Unnatural Items</b>		
Plastic fragments		
Fishing line		
Other:		
Other:		

Most interesting item in your bolus: \_\_\_\_\_

### Class Graphs:

Mass of Items in Albatross Boluses



Count of Items in Albatross Boluses



### Conclusion:

\_\_\_\_\_

\_\_\_\_\_