



Junior Ranger Shipwreck Explorer

An explorer's activity guide to the
Spanish shipwrecks of 1554
at Padre Island National Seashore



How to become a Junior Ranger Shipwreck Explorer

Did you know...

Padre Island National Seashore preserves more than just **natural resources**. **Cultural resources** are protected too. Cultural resources are defined as physical evidence or places of past human activity.

This booklet is full of exciting activities to help you explore three of the park's cultural resources. These are the Spanish shipwrecks of 1554, the oldest European shipwrecks in America!

Instructions

- Complete this activity book, while keeping an eye out for the red vocabulary words.
- There are six blue ships scattered through the junior ranger book. Can you find them all?
- When you're done, bring your completed activity book to the Malaquite Visitor Center or mail it to the park to get your Junior Ranger Shipwreck Explorer badge!

Each activity is rated by difficulty:



Easy



Moderate



Difficult

Look for these symbols in the top folded corner of each page!



The Story of the Spanish Fleet



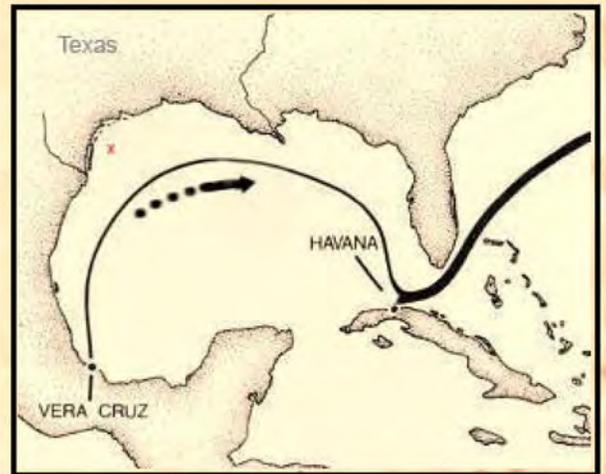
On April 9, 1554, a *flota*, or fleet, of four Spanish ships left port in **Vera Cruz, Mexico**. They were called the ***San Andres***, ***San Esteban***, ***Santa Maria de Yciar*** and ***Espiritu Santo***. They were sailing back to Spain carrying over 300 passengers and newly minted **silver** from New Spain (Mexico), along with other goods and raw material from the Americas.

The ships traveled for 20 days, hoping to reach Cuba to resupply, but they got caught in an intense storm off the coast of Padre Island and sank. Only one ship, the *San Andres*, survived, while the other ships ran aground. Once at the bottom of the ocean, they were eventually covered in sand and left undisturbed for over 400 years.

The remains of the Spanish shipwrecks are still present, and even though you can't visit or see them, they are still an important part of history to study.



Artist rendering of a ship sinking.



Map of planned route.

In the Spanish tradition, these ships were named after religious figures to help protect them on their dangerous voyages. If you were captain of a ship, what would you name it?

What would your ship flag look like? Draw it here.

A large, irregularly shaped white area intended for drawing a ship's flag. The area is blank and occupies the bottom right portion of the page.

Experience a Trip to the Americas!



Traveling by ship in 1554 was no pleasure cruise. Many things could happen during the **voyage** to slow down the trip or put the passengers in danger. Weather was unreliable, the trips were long, and people often got sick from the unclean conditions. Start your voyage in Spain and trace your path, making smart decisions along the way. With smart choices, and a little luck, you will have a safe journey!

You left Spain!

You're coming up to the last port before open ocean.



Stop and resupply.

Keep going to make better time.

Your ship is running out of supplies!

Food is running low and your crew and passengers are hungry. Do you...

Turn around.

Keep going to try and find relief.

You see a mysterious ship!

You can't tell if it's friendly or not. Do you...

Arm your ship.

Let them pass.

They keep sailing and pass peacefully.

Your ship runs out of food before you make it to port.

They get defensive and begin attacking. You take a lot of damage, but you're still afloat.

You Didn't Make it.

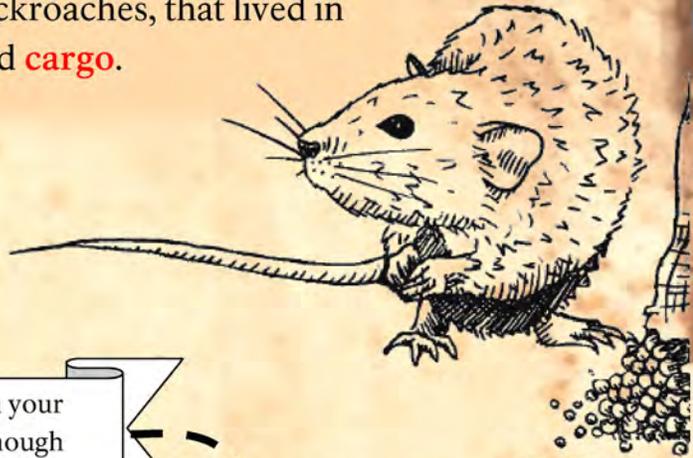
The voyage to New Spain is dangerous and full of obstacles. While many sailors make it, others are lost to the sea. Try again and see if you have better luck!



Cannons found on the shipwreck.

Humans weren't the only passengers...

...sometimes animals would travel too! They would be brought to the Americas to help start farms on new lands. However, the most common animal on these ships were pests, such as rats and cockroaches, that lived in the dark parts of the ships and lived off of crumbs and **cargo**.



You're running behind schedule!

You might need to make up time.

Do you...

Sail close to the coast for a better current.

Continue on your path, even though you might be late.

Your ship springs a leak!

Holes from the battle are causing several leaks in your hull...

Do you...

Keep sailing, it's not a big deal!

Patch the holes with tar and sheet metal.

You get caught in a storm and your ship is damaged in shallow water.

You made it, barely.

That was a close one! You made it, but your ship is worth more as scrap material and is taken apart in port.

You made it safely to New Spain!

Congratulations! You made it in one piece! Your ship and its passengers are safe and ready to start their new lives in New Spain!

To see artifacts from the 1554 Spanish ships and learn more about life at sea, visit the permanent exhibit at the Corpus Christi Museum of Science and History!



A Look at a Spanish Galleon



Ships in a Spanish fleet are different sizes, however, they all have similar functions. **Naos** were a type of Spanish ship used for cargo and passengers at the time of the voyage of the *Santa Maria de Yciar*, *San Andres*, *San Esteban*, and *Espiritu Santo* in 1554.

Label the parts of the ship by drawing a line from the illustration to the correct description!

Mast

The mast is a vertical wooden beam that holds the ship's sails up.

Rigging

Rigging consists of the poles, ropes, and pulleys that move the sails.

Crow's Nest

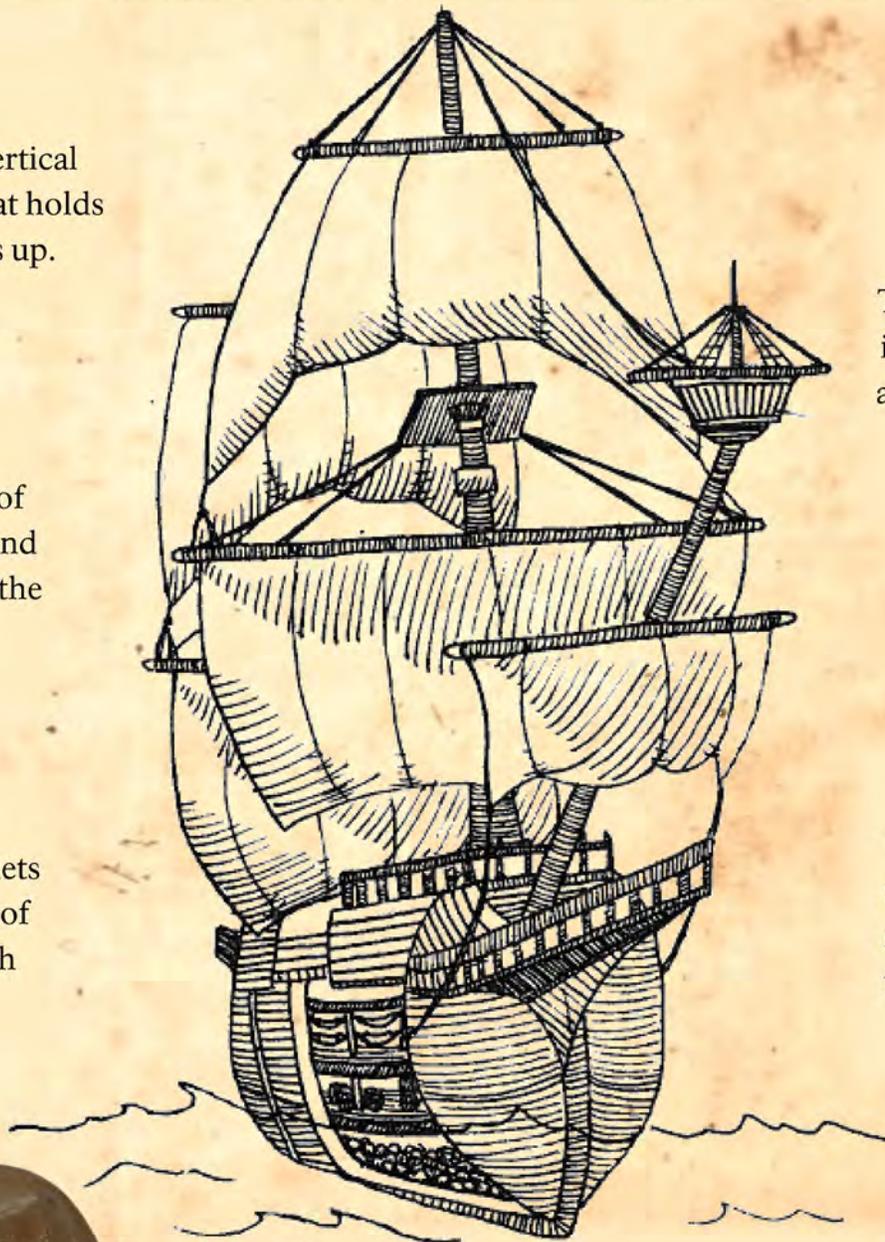
This is a place that lets the crew see more of the sea from a high position.

Sleeping Quarters

This part of the ship is where passengers and crew would rest and sleep on the unruly sea.

Sails

The sails are fabric sheets lowered and raised to help catch the wind and direct the ship.



Ballast

Ballast (mostly stone) was put in the bottom of the ship to stabilize it so it did not roll over while in rough waters.



What Happens to Sunken Ships?



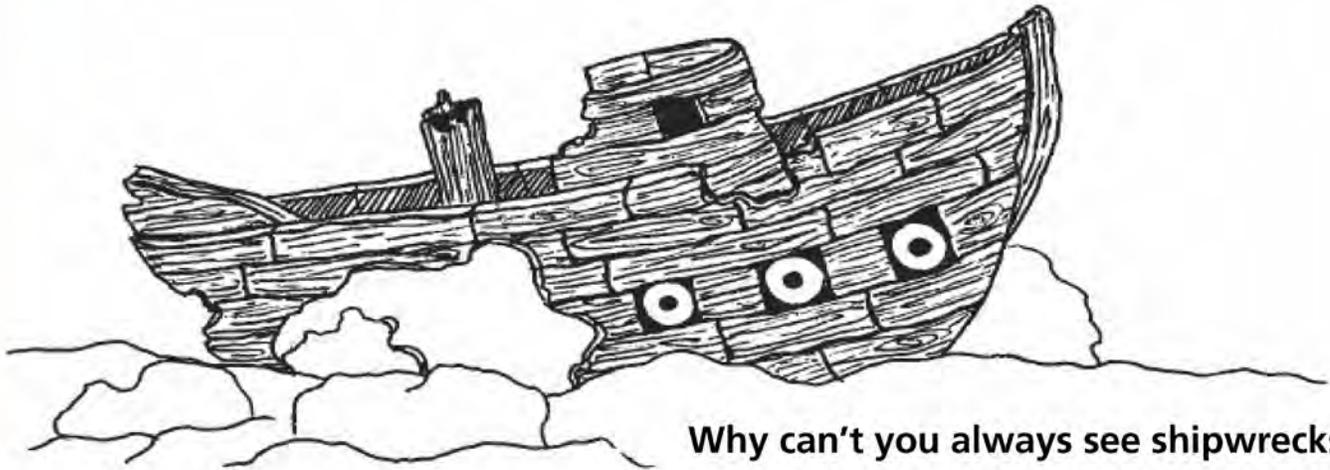
Once a ship sinks, it becomes part of the ocean floor. The ship acts as an artificial reef and creates new spaces for fish to explore and marine plants to grow. Over time, the saltwater and currents can break down soft material like wood and fabric, leaving behind very little evidence of a ship. After many years, it might not look like a ship at all!

Imagine this ship has been underwater for many years.

Draw fish living in and around the wreck.

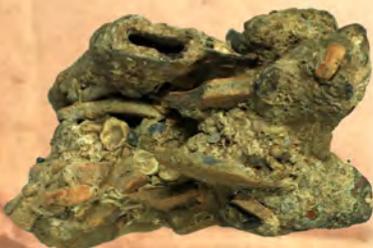
Draw a fishing net or other human-made things you might see underwater.

Draw marine plants growing in this environment.



Why can't you always see shipwrecks?

When a ship sinks, it doesn't just sit on the top of the ocean floor. It continues to settle until it rests on a more solid (often clay) layer. As it falls apart over time, it can be completely covered by sediment and become hidden.



Concretions

Shipwrecks also change their environments. Concretions form when iron changes in the saltwater and becomes cement-like. It absorbs anything around it, including sand and shells! This is a concretion recovered in 2017 from the site of the *Espiritu Santo*.

Who Owns Ship Remains?



The 1554 shipwrecks were on the ocean floor for over 400 years when a treasure hunting company came to Texas in 1967 and salvaged as much of the wrecks as they could. At the time, the state of Texas did not have any laws protecting shipwrecks. The Antiquities Code of Texas (ACT) was created to keep these wrecks, and other cultural sites safe.

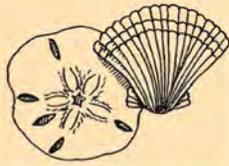
What does this law protect? The ACT was created to “locate, protect, and preserve all sites, objects, buildings, shipwrecks, and locations of historical archaeological, educational, or scientific interest...” This means that any cultural resource found on public land in Texas is protected and ultimately belongs to the public.

Which of the following are protected cultural resources?

Circle your answers.



Fishing Nets



Shells



Arrowpoint



Water Bottles



Old Coins

What do you do if you find cultural resources on the beach?

Fill in the blanks with words or phrases from the word bank to find out how to protect our cultural resources!

1. Do not _____ artifacts, but take _____! Make sure you use other objects to show your artifact's _____.
2. Make _____! Write down or note any important _____ that could help park staff identify what the artifact is.
3. Note the _____! Look at mile markers or any other _____ to help park staff find the artifact.
4. _____ your find! Locate the closest park staff and show them everything you've _____ . They will investigate and decide what it is and what to do.

Word Bank:

Observations

Details

Photos

Size

Report

Documented

Landmarks

Pick Up

Location

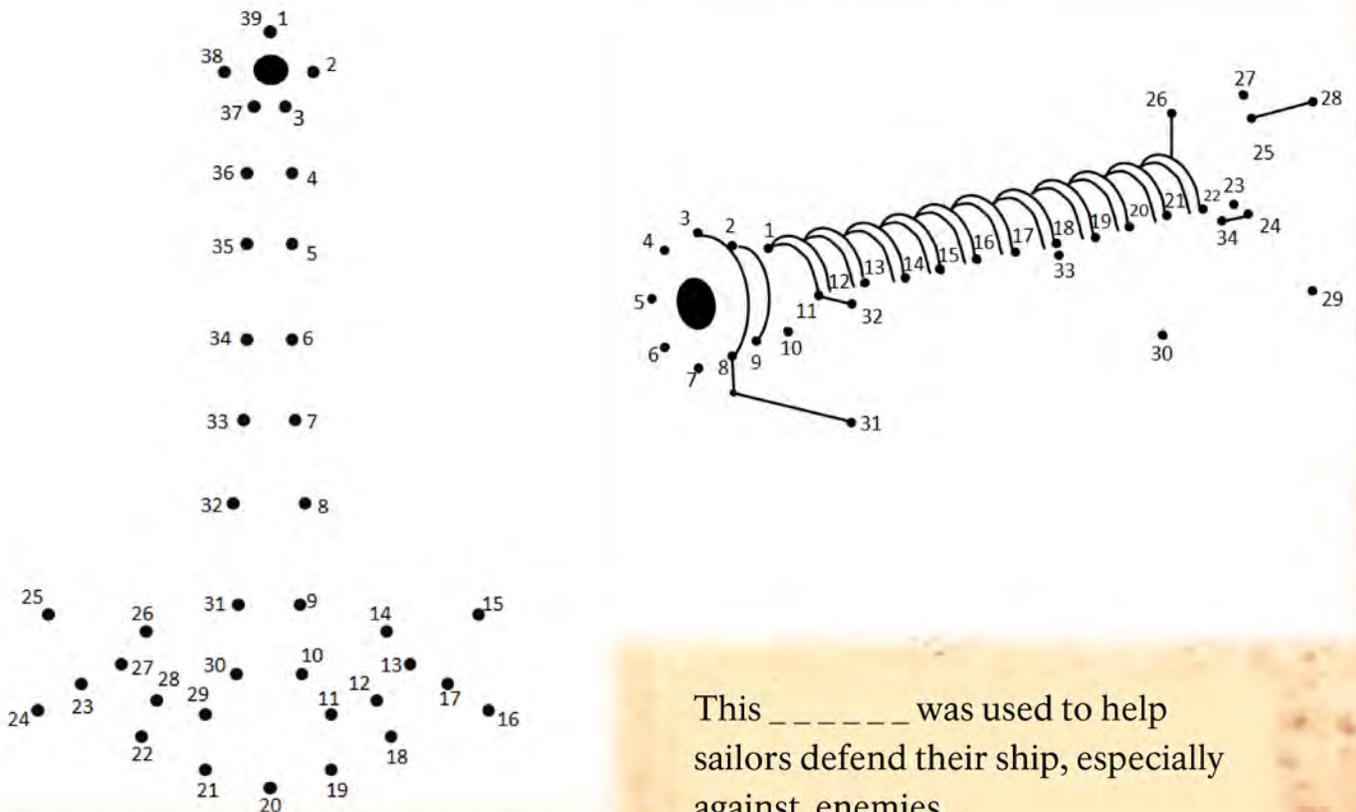
Discover Sunken Artifacts with Marine Archeologists!

Right after the ships sunk in 1554, Spain **salvaged** (collected) material from the wreck sites. The wrecks stayed untouched until their rediscovery in 1967.

The Texas Historical Commission and the National Park Service have collected **artifacts** to help us tell the story of these ships and their importance. These artifacts might not look shiny and important, but they are a valuable part of the history of Padre Island, and Spain's influence on the Americas.

Marine **archeologists** are responsible for safely finding and recovering artifacts from historical and archeological sites in the ocean.

Connect the dots to discover and identify these ship artifacts!



This artifact is known for being weak and became the subject of the phrase “as meager as a Spanish _____”.

What tools do marine archeologists use?

A **magnetometer** is a tool that measures the magnetic field of the earth underwater and marks items that could be metal. This helps find the remains from sunken ships.

This _____ was used to help sailors defend their ship, especially against enemies.



Underwater magnetometer.



What Have You Learned?

There are still many things unknown about these shipwrecks, but you've learned a lot from the Shipwreck Explorer activity guide. Show off your skills by finding all the red vocabulary words that are found throughout this guide.

U	A	V	Z	E	Y	W	L	T	A	N	C	H	O	R	E	A	H	K	S	V	A	X	T	B
O	E	E	S	U	C	C	T	L	R	M	K	P	F	D	W	S	A	I	L	S	E	M	I	S
A	X	R	R	Y	U	F	Q	C	T	A	D	C	O	E	R	P	A	I	F	R	P	I	O	W
O	H	A	C	F	L	I	Q	C	I	S	B	K	D	L	N	A	A	N	A	Z	G	A	Y	G
N	S	C	U	M	Q	S	G	B	F	T	A	A	W	W	V	I	R	Z	A	P	N	W	P	V
G	A	R	P	T	N	A	F	E	A	F	L	J	E	W	A	N	T	E	H	N	X	G	R	Z
G	R	U	I	F	P	N	Q	K	C	U	L	L	S	J	W	Q	O	Z	E	M	D	J	B	E
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C	G	Y	T	I	L	A	X	I	Y	V	W	T	S	G	O	W	I	S	X	E	N	K	F	N
U	I	C	W	N	A	D	W	S	L	U	L	S	A	L	X	K	E	N	T	I	A	M	A	C
R	S	G	O	G	N	E	C	I	M	G	K	Y	N	X	C	R	B	S	G	Y	C	P	F	R
V	T	H	D	Q	D	Y	Q	L	V	W	O	G	T	E	L	Q	E	K	A	J	C	O	F	E
V	S	Q	J	U	H	C	Q	V	F	V	X	M	O	A	S	N	S	M	O	D	G	A	A	T
R	J	B	M	A	E	I	F	E	M	Q	O	S	R	E	A	T	L	G	D	J	K	M	F	I
P	L	H	M	R	P	A	D	R	E	B	N	U	B	S	R	V	R	C	V	F	U	S	M	O
U	O	P	I	T	M	R	S	V	B	N	T	T	K	I	S	A	L	V	A	G	E	D	L	N
Z	W	N	C	E	Z	G	J	O	D	A	M	Q	W	Y	C	R	J	Q	G	D	O	R	H	S
Q	V	M	S	R	U	I	K	Y	N	F	S	H	E	L	M	V	N	N	I	X	Q	C	W	X
I	R	G	Y	S	T	B	K	M	S	I	N	B	F	W	G	Q	C	V	O	V	Z	B	A	G
M	A	G	N	E	T	O	M	E	T	E	R	M	V	R	J	I	L	K	M	D	P	B	K	A

Word Bank: archeologists, magnetometer, salvaged, concretions, artifacts, silver, anchor, voyage, Vera Cruz, Padre Island, Spain, Mexico, flota, naos, ballast, cargo, sails, rigging, San Esteban, Espiritu Santo, cultural resources, natural resources, mast, Santa Maria de Yciar, San Andres, crow's nest, sleeping quarters



Padre Island National Seashore Junior Ranger Shipwreck Explorer!

Official Certificate

This is to certify that

has successfully completed the requirements of the

Junior Ranger Shipwreck Explorer Program

Congratulations!

*You are hereby designated an official Junior Ranger
in good standing with the National Park Service.*

Park Ranger



Explore • Learn • Protect



**Padre Island
National Seashore**



**Submerged
Resources Center**



**CORPUS CHRISTI
MUSEUM
of SCIENCE
and HISTORY**

*This booklet was printed with
funding provided by Western
National Park Association.*



To receive your **Junior Ranger Shipwreck Explorer** badge, you can email photos of your completed pages with your name and address to

pais_visitor_center@nps.gov

OR mail this completed book to

Padre Island National Seashore

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