## Alliance Adventures

Spring 2015

# Coastal Dune Lakes of Northwest Florida

Coastal Dune Lakes are just as they sound — lakes that are found in the dunes. Dune lakes are permanent bodies of water that are found within two miles of the coast. Those found in Northwest Florida are irregularly shaped, particularly shallow and contain brackish water.

When you look at the dune lakes, the first thing you might notice is the water's color. Water found in our dune lakes looks like a giant glass of sweet tea, and that is because the lake is stained much like a glass of tea. The pine needles and cypress needles that fall from trees in the uplands around the lakes release tannins. These tannins stain the water brown. So it is similar to the process when making sweet tea!

Dune Lakes are only found in a few places throughout the world, but what makes the lakes in Northwest Florida particularly interesting is their outfall. When a lake reaches flood level, its water breaks through the dunes and opens up to the Gulf of Mexico. So, if you see tea-colored water entering into the gulf, most likely you are seeing a dune lake's outfall.

Here in Northwest Florida, coastal dune lakes are found on a 26-mile stretch of beach

found on a 26-mile stretch of beach in South Walton County. In South Walton, there are 15-named coastal dune lake largest dune lake largest dune lakes.

### Outfalls

Did you know that the coastal dune lakes occasionally connect to the Gulf of Mexico?



When a lake reaches flood-level, its water cuts through the dunes to create a temporary channel between the lake and the Gulf. This part of the lake is known as the outfall. As you can see in the picture, the outfall empties lake water into the Gulf and an exchange of water occurs. Saltwater from the Gulf enters the lake while brackish water from the lakes enters the Gulf.

Many of the 15-named lakes sit inside state parks including Topsail Hill State Park, Deer Lake State Park, Grayton Beach State Park and Camp Helen State Park.





## Alliance Activities

#### Coastal Dune Lake Crossword

Dune Lakes	• • •	• • •	• • • •
	N A	H R	R D
Eastern R G U L B M I X E A	S T	E R	N U
Alligator E A Z I B N L K Z V	T W	U P	I N
Fuller ELSTIWLCSC	C E	A K	D E
Big Redfish D L I T G A E L H U	I K	LA	FL
Little Redfish S E R L R T B S E A	H L	L P	Y A
0			
Campbell • T N R E E S P T T W	N D	ΙA	N K
Morris • X C O R D R M O K E	О Н	G D	E E
Camp Creek • L Z M E F E A L P L	R P	A R	C S
Oyster •U H E D I L C F Z V	P N	T A	K L
Deer HLTFSLAAOZ	K Q	O P	E T
Powell WHCIHUXYXO	Z F	R E	A Y
Draper *U Y G S T F S L D H	E Z	N R	Q C
Stallworth X S M H J T H T R O	WL	L A	T S
Allen BSKKEBDKEE	R C	P M	A C
Western Q I A R X C K O Z Y	W L	U U	O A

## NO PO

### 🦫 Help Mr. Pompano!

Did you know there are 15-named Coastal Dune Lakes in South Walton?

You can also find dune lakes in Australia, New Zealand, Madagascar & Oregon!

The water in the dune lakes is brackish, which is a mixture of fresh and saltwater!

Gulf

This pompano wandered away from his home in the Gulf and into Western Lake when the outfall opened up. Can you help him get back to his home before the outfall closes?