



NO BETTER PLACE
TEXAS GULF SHRIMP GUIDE
NO BETTER TASTE

TEXAS DEPARTMENT OF AGRICULTURE

COMMISSIONER
SID MILLER





TEXAS GULF SHRIMP

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Healthy. Flavorful. Delicious.

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LETTER FROM AGRICULTURE COMMISSIONER SID MILLER

The Texas shrimp industry is a vital part of Lone Star agriculture, and we all know one thing for sure: *Texas Agriculture Matters!*

For generations, the bountiful waters of the Gulf of Mexico have provided a distinctive lifestyle for Texas commercial fishermen. This industry, fueled by hard work and the sea, feeds a nation hungry for tender, premium, wild-caught seafood, including delicious Gulf shrimp. Within these hardworking men and women, pride runs deeper than our Lone Star waters. The history of Texas shrimp is a story of innovation and preservation that continues to this day.

Gulf shrimp are a true Texas treasure that's wildly popular with consumers and professional chefs alike. Who can blame them? With miles of clean, sustainable coastline framing the Gulf of Mexico, why buy, serve or eat shrimp from anywhere else?

Simply put, Texas provides an abundance of seafood options for consumers worldwide. These delicious catches, locally harvested throughout the year, provide an easily accessible seafood market for health-minded individuals. Day-in and day-out, you'll find the very best of Texas from our docks to your plates.

The *Texas Gulf Shrimp Guide* is your source for everything the Texas shrimp industry has to offer. The bounties of our waters run deep, and I hope you'll enjoy delicious shrimp from right here in Texas.

Texas Gulf Shrimp: Better by a Nautical Mile!



Commissioner Sid Miller
Texas Department of Agriculture





WHY CHOOSE TEXAS GULF SHRIMP?

Texas Gulf shrimp are harvested from the pristine waters of the Gulf of Mexico and its coastal bay systems. Their reputation for premium quality is derived from a natural, robust flavor prized by good cooks and renowned chefs alike. In fact, top Texas chefs are fortunate to have the Gulf of Mexico and its bounty in their own backyard. They consistently choose wild-caught Gulf shrimp in their kitchens, because they are deliciously sweet, compliment any occasion and offer an array of flavor in every bite!

Wild shrimp also have a unique, briny (ocean-like) flavor because of their healthy, natural diet. This is just another way Texas Gulf shrimp set themselves apart from other available species. These tantalizing flavor compounds are particularly apparent in brown shrimp.

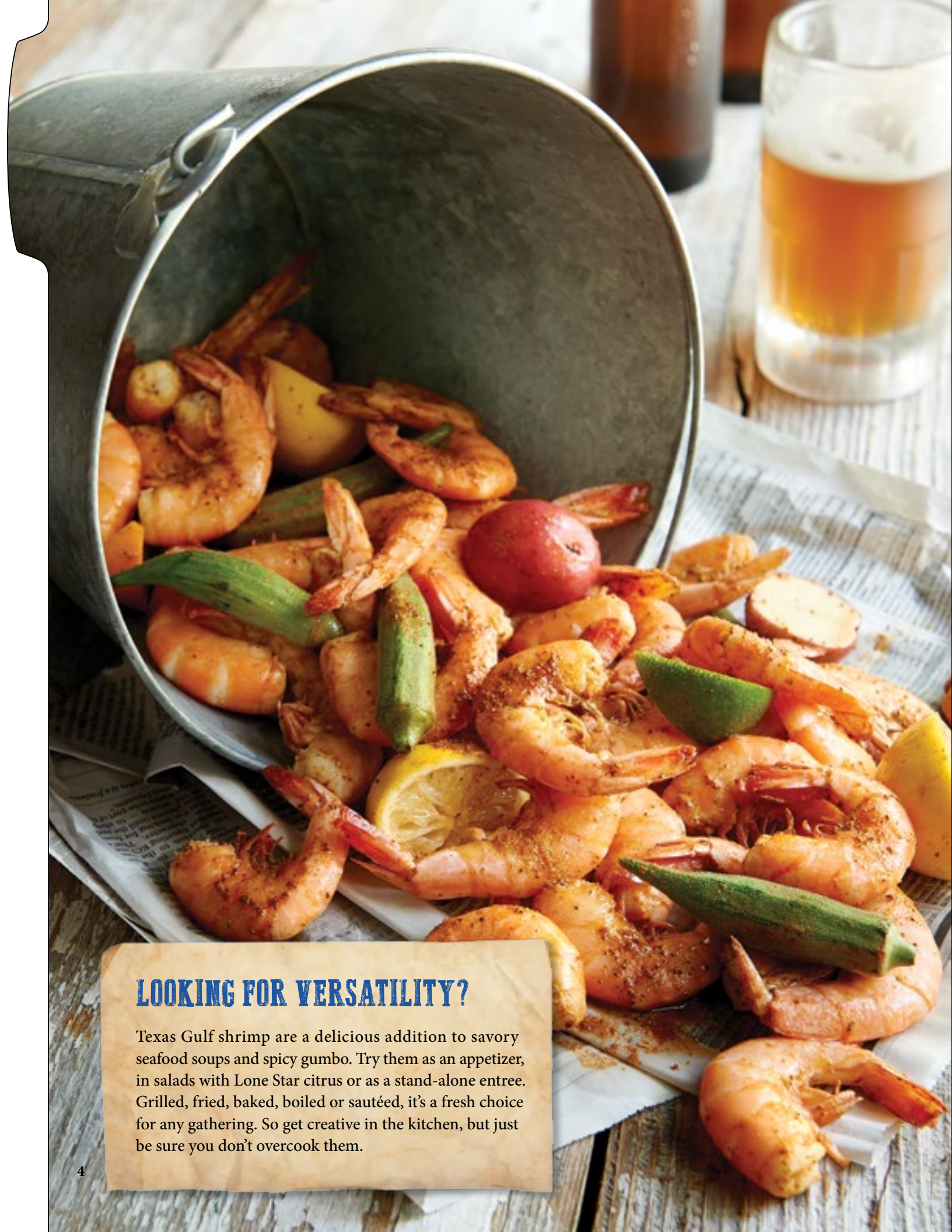
What are you planning to prepare?

Do you cook from a recipe? Are you the kind of intuitive chef who freelances in the kitchen? Whatever your method, Texas Gulf shrimp bring a wealth of quick, healthy and flavorful options to your table. From delicious Gulf shrimp with balsamic strawberries to classic staples like slow-cooked paella, visit gotexan.org for all of your favorite recipes. It's the place to find classic shrimp dishes and creative new options sure to please any appetite.

SHRIMP AL MOJO DE AJO



Find this and many other recipes at gotexan.org.



LOOKING FOR VERSATILITY?

Texas Gulf shrimp are a delicious addition to savory seafood soups and spicy gumbo. Try them as an appetizer, in salads with Lone Star citrus or as a stand-alone entree. Grilled, fried, baked, boiled or sautéed, it's a fresh choice for any gathering. So get creative in the kitchen, but just be sure you don't overcook them.

TEXAS GULF SHRIMP VARIETIES

What types of shrimp are caught in Texas?

There are more than 100 species of commercially available shrimp in the world, and Texas Gulf waters are home to two of the best varieties: Brown shrimp (*Farfantepenaeus aztecus*) and White shrimp (*Litopenaeus setiferus*).

Pink shrimp are also caught in Texas waters but not as frequently as the species mentioned above.

By far, **Brown shrimp** is the most dominant species caught by Texas shrimpers. Brown shrimp are primarily harvested at night from the deeper waters of the Gulf of Mexico. Growing up to 9 inches long, these nocturnal shrimp can be identified by the grooves on the topside of their head and last segment on their tail.

White shrimp can reach up to 8 inches in length. They are grey in color, mild in flavor and generally harvested from shallow water closer to shore.

Whether you enjoy the hearty, bold flavor of premium brown shrimp or the sweeter, lighter taste of delicious white shrimp, you'll find them both thriving in the Texas Gulf.



BUYING TEXAS GULF SHRIMP: WHAT TO LOOK FOR

When buying from a service counter, check the price label. That's where you'll find the Country Of Origin Labeling (COOL), which indicates the source of the product. Make sure the label says, "Wild shrimp, harvested in the United States," to ensure you get premium quality.

Determining Size and Count

In most cases, Texas Gulf shrimp is sold according to size based on the "count," which is the number of head-on or headless shrimp per pound. In other words, the lower the "count," the bigger the shrimp.

For example, if the label reads 21/25, that means there are 21 to 25 shrimp in one pound. Size can also be described in terms like jumbo (U-10), large (16/20), medium (43/50) and small (98/130), but such terms are often used inconsistently by different vendors.

Finally, if there is a U amount displayed, this means that there are under a certain number of large shrimp per pound. For example, if you see U/15, that means there are less than 15 shrimp per pound.

If you are purchasing frozen shrimp, referred to as Individually Quick Frozen Peeled and Deveined (IQF P&D) in industry terms, the product you are purchasing is sold as a finished count. This means there will be a larger number of peeled shrimp per pound than the original shell-on. IQF shrimp offerings also include shell on and head on.



Helpful Hint

Looking for Texas Gulf shrimp?

Visit gotexan.org and click on Texas Shrimp to find dockside, wholesale and retail shrimp sellers along the Texas coast.

USE YOUR SENSES

Your senses are an effective tool for determining the quality of your selection. Any Gulf shrimp you purchase should look firm and translucent, and their shiny shells should still be intact. The shells should have no visible flaws or unusual characteristics. If you find flaws, this can be an indication of poor handling on the boat and/or in the processing plant.

Additionally, shrimp should always smell fresh, mild and like the ocean. Do not purchase shrimp exhibiting a strong fishy or ammonia-like scent, as this indicates decomposition. Temperature issues are most commonly noted by a very discernible, red color.

Finally, when buying frozen shrimp, read the label carefully. Today's shrimp packaging provides a wealth of information, including a detailed list of ingredients, preservatives/additives and the location of where your shrimp came from. Remember, you always want to look for and select U.S. harvested Gulf shrimp — preferably from Texas.

Avoid any shrimp package that appears abused, torn or unsealed. Ice crystals or signs of frost on the product may indicate that the package has been frozen for an extended period of time, or that it has been thawed and refrozen.

Frozen shrimp that will be used within two days of purchase can be thawed and kept in the refrigerator. However, if storing longer than two days, shrimp should remain frozen and wrapped in foil, moisture-proof paper or plastic. Every time you freeze and thaw any seafood and then repeat the process, you are diminishing its flavor and texture.



Helpful Hint

When freezing shrimp for longer storage times, it is best to separate into meal-sized amounts and freeze in containers or plastic bags with the shrimp completely immersed in water.

PRAWNS VS. SHRIMP: WHAT'S THE DIFFERENCE?

Today, the terms prawns and shrimp are used interchangeably, but there are some distinct features that set the two relatives apart. While there are many similarities, the main differences are the way their shells are segmented and the length of their legs.

Freshwater prawns have a shell on the second abdominal segment of their body that overlaps the shell of both the first and third segments. Tropical saltwater shrimp shells each overlap just one adjacent abdominal segment, just like scales on a fish.

Shrimp have three pairs of legs terminating with pincers, also called chelae, which they use to move food to their mouths. Commonly sold prawns in the United States have chelae only on the first two pairs of legs. Also, the second leg is typically much longer and thicker than the others, and the remaining six walking legs end with simple claws, not pincers.

In North America, the term prawn is generally used to describe larger shrimp. However, in the United Kingdom, Australia and other countries, prawn is a generic term used to describe all shrimp.

The important thing to remember is while there may be subtle variances in taste and texture, shrimp and prawns are generally interchangeable in the kitchen.

CILANTRO LEMON PEPPER
GRILLED TEXAS WILD CAUGHT
SHRIMP *with* TABASCO MAYO
and RADISH SLAW



Find this and many other recipes at gotexan.org.



PREPARING GULF SHRIMP

Texas Gulf shrimp is one of the most popular types of seafood in America, because it is quick and easy to prepare. Follow these tips for the safest and most satisfying results.

Thawing

For small amounts of frozen shrimp, thaw overnight in a refrigerator. To expedite the process, place shrimp in a sealed plastic bag and immerse in cold water.

For Gulf shrimp sold in bulk, also referred to as “Block Frozen Shrimp,” thaw in colander under cold running water. Be sure to monitor the shrimp closely as they separate from the ice.

If you plan to use your frozen shrimp immediately, microwave on the defrost setting until the shrimp are icy but pliable.

Storage

Thawed shrimp can be stored in the refrigerator for two to three days, if placed in a leak-proof plastic bag or plastic container with a lid. You should cover the bag or container with ice to ensure optimum quality.

Sanitary Practices

To avoid cross-contamination, clean your utensils and kitchenware before and after it comes into contact with any raw protein, including raw shrimp. Also, make sure to keep your shrimp separate from any other ready-to-eat food during preparation.

FUN FACT

The average American consumes 4.10 pounds of shrimp per year. 83% of U.S. shrimp comes from the Gulf of Mexico.

Removing the Shell

If you are not planning to boil or grill your shrimp, you will want to remove the shell before cooking. Here is how: While holding onto the shrimp tail, carefully remove the shell around the body using your fingers, a knife or kitchen tool, then detach the tail fan completely or leave it on for presentation purposes.

Deveining Shrimp

After removing the shell, take a paring knife and make a shallow cut lengthwise along the outer curve of the body. You will want the cut to follow the vein line. Once the vein is exposed, simply rinse with cold running water. This can also be accomplished with a shrimp deveiner — a must have tool that will easily peel and devein shrimp at the same time.

Note: The vein is actually the shrimp's digestive tract and is generally removed on larger shrimp. However, the vein is perfectly safe to consume once the shrimp is fully cooked. In fact, many chefs feel as though it contributes to the unique flavor of wild shrimp.

Butterflying Shrimp

Next, peel the shell from the shrimp's body; carefully cut halfway through shrimp along the outer curve from the tail towards the head and gently pull apart the meat.

Helpful Hint

Devein the shrimp while you are butterflying.



TEXAS GULF SHRIMP—GO OVERBOARD!

Anyone who has watched the movie *Forrest Gump* can tell you Gulf shrimp are amazingly versatile. In a memorable scene, one of Forrest's pals, Bubba, recites a long list of ways to prepare his favorite seafood. Shrimp, he said, can be fried, barbecued, boiled, baked, grilled and sautéed. It can be dropped into stir-fry, gumbo, etouffee, seafood stew or creole. The possibilities are endless.

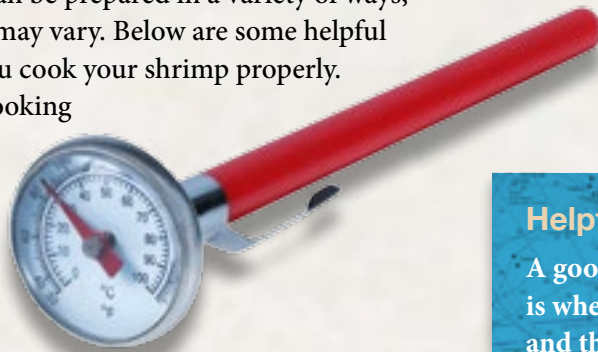
Like Bubba, Texans know Gulf shrimp! On the coming pages you'll find a few cooking methods to help you prepare your favorite Texas Gulf shrimp recipes.



COOKING METHODS

Temperature

Because Gulf shrimp can be prepared in a variety of ways, cooking temperatures may vary. Below are some helpful indicators to ensure you cook your shrimp properly. Remember to follow cooking instructions closely.



Helpful Hint

A good indicator that your shrimp are ready is when it curls into the shape of the letter “C” and the flesh becomes pearly and opaque. If your shrimp resembles the shape of a button, it may be overcooked.

Boiling

Bring water to a boil and, if you wish, add in your favorite spices and seasonings. Do not peel shrimp; add them directly to the boiling water. When shrimp begin to float, which generally takes about two to three minutes after water returns to a boil, strain them into a colander. You will want to immediately place the shrimp into an ice bath or under cold running water to stop the cooking process. This not only prevents overcooking, but it also makes the shrimp easier to peel.

Helpful Hint

Limit the amount of salt you add to your shrimp to a teaspoon or less per quart of water. Sweet Gulf shrimp have a clean, natural, briny flavor, and you don’t want to overpower it with too much added salt.



Find this and many other recipes at gotexan.org.



Deep Frying

For delicious fried shrimp, simply dip peeled Gulf shrimp in milk then lightly dust with seasoned flour or cornmeal. Heat oil in a pan or fryer, carefully add the shrimp, and fry until golden brown.



Blackening

Blackening is a delicious Cajun cooking technique used to prepare various foods. To blacken, simply dip peeled Texas Gulf shrimp in melted butter, then dredge in a mixture of herbs and spices. Next, you will cook the shrimp in a very hot cast-iron skillet.



Grilling

Grilling is a popular and excellent way to prepare sweet Gulf shrimp. Typically larger-size shrimp like U/10s are easier to maneuver on a grill, but no matter what size you choose, Gulf shrimp cooked over an open flame is sure to fire up any appetite.



Pan Frying

First, you'll want to thaw frozen shrimp. Peel and devein, if desired. Gently dry with a paper towel before cooking. Heat 1/4 teaspoon of Texas olive oil in a large skillet. Add shrimp and desired seasoning. Cook for three to five minutes, turning the shrimp occasionally. Be sure not to overcook.

HEALTHY OPTIONS

Texas Gulf shrimp are rich in nutrients.

Now that you know how to select and prepare Texas Gulf shrimp, here are several reasons why you should make them part of your healthy diet.¹

- Texas Gulf shrimp contain no saturated fat and are power-packed with essential amino acids — the building blocks for human cells and tissue.²
- A moderate portion of medium-sized Gulf shrimp is well within dietary recommendations for cholesterol intake, and shrimp provide a substantial source of protein.³
- Each Texas Gulf shrimp is loaded with essential vitamins and minerals including, but not limited to, vitamins D, B12 and B6, iron, copper, zinc, magnesium, phosphorus, niacin, choline and omega 3 essential fatty acids.⁴
- At a mere seven calories per medium-sized piece, shrimp can be a great addition to a healthy diet. A person eating 1,800 calories per day can eat 20 shrimp and only spend about eight percent of their daily caloric intake.²
- Those same 20 shrimp equate to only 140 calories, yet you benefit from 25 grams of protein!
- By choosing Texas shrimp, you are making one of many smart choices to live a healthier lifestyle.



FUN FACT

Omega 3 essential fatty acids cannot be synthesized by the human body and must be obtained from an alternative dietary source.⁵
Texas Gulf shrimp are a delicious source of the essentials that your body needs!

- Shrimp are a natural appetite suppressant. Once the protein in shrimp is broken down, peptides stimulate the release of the hormone, cholecystokinin (CCK), that tells the body it is full. Eating foods that give the feeling of fullness could help decrease obesity.⁴
- Texas shrimp contain astaxanthin, a carotenoid that's receiving special attention for its anti-inflammatory and antioxidant properties.⁴
- Texas Gulf shrimp are an excellent source of selenium, which helps the body's natural antioxidants like glutathione peroxidase (GPO) protect against cellular damage and keep cells functioning normally.⁴

FOOD FOR THOUGHT

The U.S. Department of Agriculture and American Heart Association recommend eight ounces of seafood each week.^{2&5} If consumers follow this recommendation, the annual individual consumption per capita would be at 26 pounds, up from the current 14.4 pounds per capita. In other words, eat more Texas Gulf shrimp, and you will be helping yourself and the Texas economy.

Sources and Additional Information

¹ www.organicfacts.net/health-benefits/animal-product/health-benefits-of-shrimp.html

² www.seafoodhealthfacts.org/seafood_nutrition/patients/composition_chart.php

³ www.healthline.com/health/shrimp-cholesterol-and-heart-health

⁴ www.whfoods.com/genpage.php?tname=foodspice&dbid=107

⁵ www.heart.org/HEARTORG/GettingHealthy/NutritionCenter/HealthyEating/Fish-101_UCM_305986_Article.jsp

TEXAS GULF SHRIMP
over CREAM CORN
and JALAPEÑO JELLY

**FUN
FACT**

Astaxanthin gives cooked shrimp its reddish color.

Find this and many other recipes at gotexan.org.



Healthy Opportunity: Calling All Chefs

Are you a seasoned or aspiring Texas chef? If so, TDA has a wonderful opportunity for you. Showcase yourself, your Gulf shrimp recipes and your restaurant on TDA's shrimp website for free! It's a powerful platform that informs consumers about your support for hardworking Texans and the products they produce.

TEXAS NETWORKING

TEXAS GULF SHRIMP

WILD WITH FLAVOR



TEXAS SHRIMPERS CARE. SO SHOULD YOU!

When you choose wild-caught shrimp from the Lone Star State, you are buying more than a delicious product — you are investing in a way of life. Hard working Texas commercial fishermen are committed to bringing the finest product available to market and to your table.

You are also helping the environment. Texas shrimpers, along with state and federal agencies, university systems and industry partners, ensure that this safe, renewable resource remains an abundant part of our waters for decades to come. We are fortunate that Texas Gulf shrimp thrive in such favorable environmental conditions. Sound fishing practices like we have here in Texas also help shrimp thrive.

With continual support from Texas shrimpers and proactive industry partners, our coastal ecosystem will remain strong, healthy, balanced, and well-positioned for future success.

How is Texas Gulf shrimp caught?

Texas shrimp harvesters adhere to high quality control standards and seafood safety practices for getting shrimp from the Gulf to your plate. In Texas, most shrimp are caught with trawls, or cone-shaped nets, that taper to a narrow end called the bag. The two “wings” of a trawl are attached to “trawl doors” which are weighted with metal shoes or door irons.

Once the shrimp boats drop their nets and begin the towing process, the trawl’s mouth is held open by the spread of the doors, which produces a kite-like action as it drags the bottom of the sea. The fishing gear is designed to ride lightly across the seafloor where the shrimp reside and not dig into the rich sediment below. After one to three hours of trawling, the net is pulled out of the water. A line holding the bag closed is released, and the day’s catch pours out onto the boat’s deck. The crew then sorts through the catch, de-heads the shrimp and quickly freezes them onboard. While a majority of Gulf shrimp caught at sea are quick-frozen on the boats, there are still a few ice boats around and in operation.

To view a shrimp trawl in action, visit www.shrimpalliance.com. You’ll want to scroll to the bottom of the Web page and click on *How Does A Shrimp Boat Work* to see more.



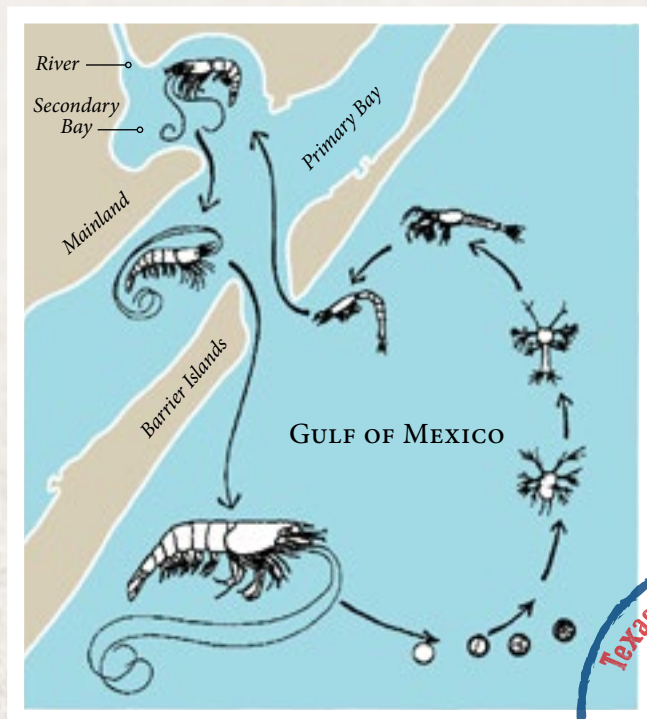
Species Protection

The Texas shrimp industry continues to play a key role in protecting various forms of marine life, including the Kemp's Ridley Sea Turtle. All Texas shrimp boats are equipped with Turtle Excluder Devices (TED) and Bycatch Reduction Devices (BRD) that allow shrimpers to release other forms of sea life that are accidentally caught during harvest. Both devices help maintain a healthy Gulf that is ecologically balanced.

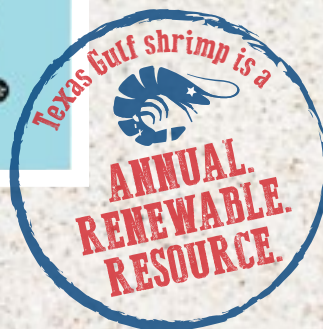
Gulf Shrimp Life Cycles

Texas commercial fishermen harvest their shrimp soundly and without disrupting natural ecosystems.

Larval and Post Larvae: Adult shrimp spawn offshore in the Gulf of Mexico. Microscopic eggs hatch and, over the next two to three weeks, metamorphose through 10 larval stages before reaching the post-larval stage. Post-larvae look like miniature adults, become bottom-dwelling creatures and ride tidal currents into Texas' coastal estuaries.



Juvenile and Sub-Adult: Shrimp grow rapidly, about two to three inches per month, in nutrient-rich estuarine nursery areas where they find abundant food and shelter from predators. Like many invertebrates, they grow in spurts by first casting off (molting) their outer shell (exoskeleton), then swelling up and growing a new shell. Small shrimp may molt several times a week, but molting slows as they become larger. By the time they become sub-adults at 3 to 5 inches long, the shrimp begin to leave the relative safety of the bays and migrate into the open waters of the Gulf of Mexico. That's where they mature and complete their lifecycle. Shrimp live an average of one year.



WHY SHOULD YOU DROP YOUR NETS IN LONE STAR WATERS?

Your Neighbors: Texas shrimpers are responsible for approximately one-third of all shrimp harvested from the Gulf of Mexico each year. It's a way of life that supports thousands of Texas jobs.

Your State: When you buy Texas Gulf shrimp, more of your money helps support Texas shrimpers and the local businesses that depend on them.

The Environment: Texas shrimp producers adhere to important conservation standards to preserve and protect the environment.

Shrimping is Big Business in Texas!

Texas ports have become popular attractions for coastal visitors looking for dockside shrimp. So the next time you visit the Brownsville Shrimp Basin, Freeport, Port Lavaca, Galveston, Port Isabel, Palacios, Port Arthur or any other town on our picturesque coastline, thank a Texas shrimper. It is because of their tireless efforts that we can enjoy sweet, Gulf shrimp all year long. In fact, the next time you purchase or eat seafood, don't just ask for Texas Gulf shrimp, **insist on it!**

On behalf of every Texas shrimp fleet owner, captain, deckhand, processor, distributor, retailer and everyone associated with the Texas shrimp industry, **thank you for choosing Texas Gulf shrimp!**

FUN FACT

Texas takes the unique step of closing its coastal waters between May 15 and July 15. That allows shrimp species to migrate from the protected bays and estuaries to the Gulf of Mexico in order to grow and repopulate.



ABOUT GO TEXAN

The Texas Department of Agriculture's Shrimp Marketing and GO TEXAN programs promote goods produced and harvested in the Lone Star State. For information about the Texas shrimp industry, visit gotexan.org.



WILD-CAUGHT TEXAS GULF SHRIMP

FLAVOR BEYOND WORDS



AWESOME
SALADS
BROWN
SHRIMP
APPETIZERS
DELICIOUS
TEXAS
QUALITY SCAMPI
GIFT FROM THE GULF
SWEET
FRESH FROM THE TEXAS GULF
NATURAL VITAMINS
WILD-CAUGHT
VERSATILITY
PLENTYFUL
BOILED
FRIED
SHRIMP
YUM!
MUSCLE-BUILDING
CLOSE TO HOME
HIGH IN PROTEIN
SO MANY
USES
WHITE SHRIMP
QUALITY FOOD
GOOD FOR YOU
EAT LOCALLY
SOUPS
FRESH & HEALTHY
NUTRITIOUS
SAFE
GO ASK FOR IT
OMEGA 3'S
SUSTAINABLE
FLAVORFUL
ROBUST
TEND



ACKNOWLEDGEMENTS

The Texas Department of Agriculture would like to thank each individual who contributed to this guide. Your dedication to the Texas shrimp industry and commitment to excellence provides consumers the best tasting wild-caught shrimp in the world.



GO TEXAN.®

TEXAS DEPARTMENT OF AGRICULTURE
{ SHRIMP MARKETING PROGRAM }

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