

## 04 SURF GUIDE

### Exploratory Research in the Gulf of Thailand

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# Surfing The Southern Gulf

Comparing the surf of the Andaman Coast with the windy waves of the Gulf of Siam is like comparing apples and oranges; each has its own color, flavor, and experience — each coast has its own day when the surf is on.

## FEATURE

- The nearly 2000-kilometer-long coastline (including the many islands) of the Gulf of Siam forms a shallow sea of wind-swept waves. While all provinces in the Gulf have waves at some time or another—from Rayong and Trat in the north to Pattani and Narathiwat in the south—Koh Samui is the definitive surfing destination of the Gulf.
- This article serves as an introduction to the Gulf surfing experience through the environmental science and study of the region, including meteorology, and historical and cultural geography.
- Surfing insights to 4 premier surf destinations in the Southern region are featured in this issue — from the emerald waves of Koh Samui in Suratthani to the brown barrels of Pattani.

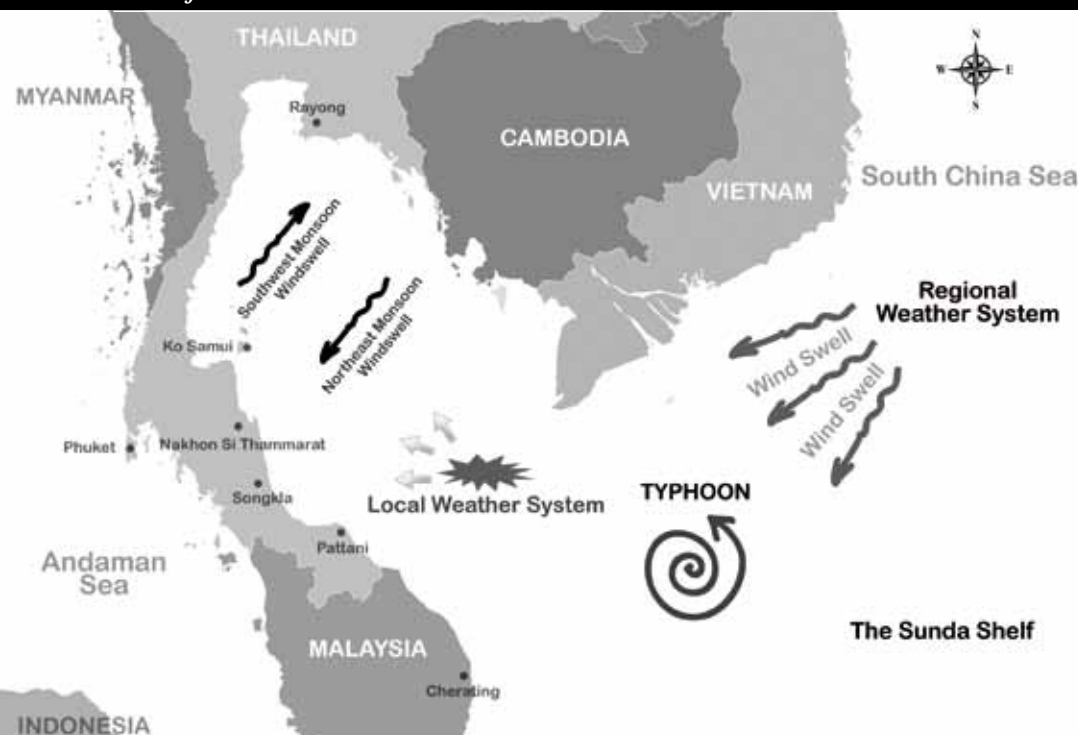


## "GOING to The GULF ! NOT GOING to GOLF !"

"One of the funniest things about surfing The Gulf in recent years has been the misunderstanding among friends and colleagues in Phuket regarding just what we're doing..."

**For example:** Q: Where are you going? A: I'm heading over to the Gulf today. Q: Where are you playing, at The Phuket Country Club? A: No, we're going surfing in the Gulf! Q: Huh? Are you crazy?





## SURF SCIENCE GULF OF SIAM



## METEOROLOGY

### Surf-generating weather events in the Gulf of Thailand

- Windswell generated by the Southwest Monsoon (May to October) which arrives at Gulf Coast provinces including Rayong to Trat.
- Northeast monsoon windswell (November to March) which arrives at the Gulf Coast provinces of Chumphon, Surathani (Koh Samui), Nakhon Si Thammarat, Songkla, Pattani, and Narathiwat.
- Regional weather systems from the South China Sea which can generate large easterly windswells which arrive at Surathani (Koh Samui), Nakhon Si Thammarat, Songkla, Pattani, and Narathiwat from the east and southeast.
- Local weather systems and storm fronts which create windsea (mixed wave heights) within the Gulf.
- Typhoons which enter the Gulf of Thailand from the east, or generate in the Gulf. These cyclonic storms can produce intense storm surges and big surf at any or all provinces in the region.

## SURF SEASONS

The Gulf of Thailand is defined by an imaginary line running from the mouth of the Mekong River (Vietnam) to the estuary of Malaysia's Kelantan River, just south of the Thai border. South and east of the Gulf is the South China Sea.

The Gulf has waves, to some extent, all-year-round. The south and west-facing shores of the eastern Gulf are exposed to the blustery winds of Southwest Monsoon (just like Phuket!) from May through October. However, given the limited fetch and shallow bottom of the Gulf, waves are rarely bigger than shoulder-height during this time of year. When the monsoon wind flow reverses in November, the east-facing coastal areas of the Gulf receive choppy, shoulder-height wind swell, with southern province surf sites, from Koh Phangan and Samui to Narathiwat in the deep south, being the best.

Beginning in November each year, powerful weather systems form in the South China Sea and push southward like a great glob of wild weather. These low pressure systems drive wave energy toward the east coast of Malaysia (especially Cheraing and Desaru!). Wave activity can refract (bend) around the southern tip of Vietnam and push into the Gulf. These large and powerful windswells produce the best surfing waves found in the Gulf and are the closest thing to groundswell in the region. These South China swells (southeast swells) are best from Koh Samui southward.

November is the notorious month for cyclonic storms, which can reach typhoon strength and send a variety of wave types and heights throughout the region. Given the relative size and limited fetch of the Gulf, typhoons can encompass and affect the entire region with storm surge. As the typhoons move into or across the Gulf, hour by hour, the provinces affected by high surf may rapidly change (i.e. one day Songkla has big waves and the next day Rayong has the big surf).



## BATHYMETRY

The Gulf is a shallow sea of approximately 50 meters with sediment shoals in some areas, such as the very northern Gulf. Deepest waters are around Koh Chang in the Northeast; Koh Samui and Koh Phangan in the south west; and Narathiwat in the deep south. At its greatest depth, the Gulf is at best only 80 meters.

## TIDES

Although the Gulf is especially shallow, it is defined by steep undersea gradients to the east where the continental shelf (the Sunda Shelf) plunges into the deep waters near Sulawesi and the Philippines, resulting in strong tidal friction and strange semi-diurnal tides along the Thai coast (just one high tide per day!). These peculiar tides are an added twist to the Gulf surfing experience.





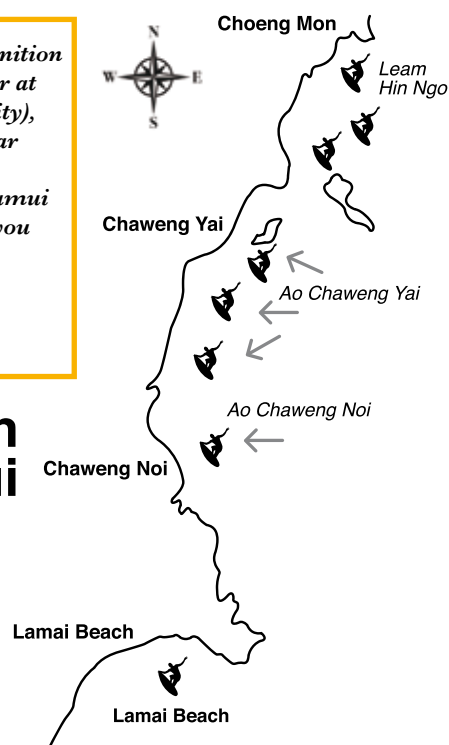
## Surathani KOH SAMUI!

The undisputed most popular place to surf in the Gulf is Koh Samui!



*According to definition (by Martin Fluker at Victoria University), If you pack the car and drive from Phuket to Koh Samui for surfing, and you stay overnight, then you're a "Surf tourist"*

## Koh Samui



It is unlikely that a surfer would travel from overseas to surf Koh Samui, but it is however a great weekend escape for the Phuket surfer. Given the lag time of the ferry services, it is best to stay at least one night on the island. It is nonetheless rather novel to self-drive your car with surfboards, coolers, and family and friends, onto the ferry for just 250 baht.

**Ao Chaweng Yai** is the main surf beach on the island and there are several surf sites and surfboard rental stands there. On the right swell direction and tide, the shallow point on the south end of **Ao Chaweng Noi** can work. When there is a solid swell, **Choeng Mon** (to the north) has outer reefs that can hold big waves and the northern point (Laem Hin Ngo) can dish up some solid lefts. Otherwise, southeast swells will break at **Lamai Beach** on the right day and at several shallow reefs along the southeast coast accessible through local hotels.





# Nakhon Sri Thammarat

## KHANOM



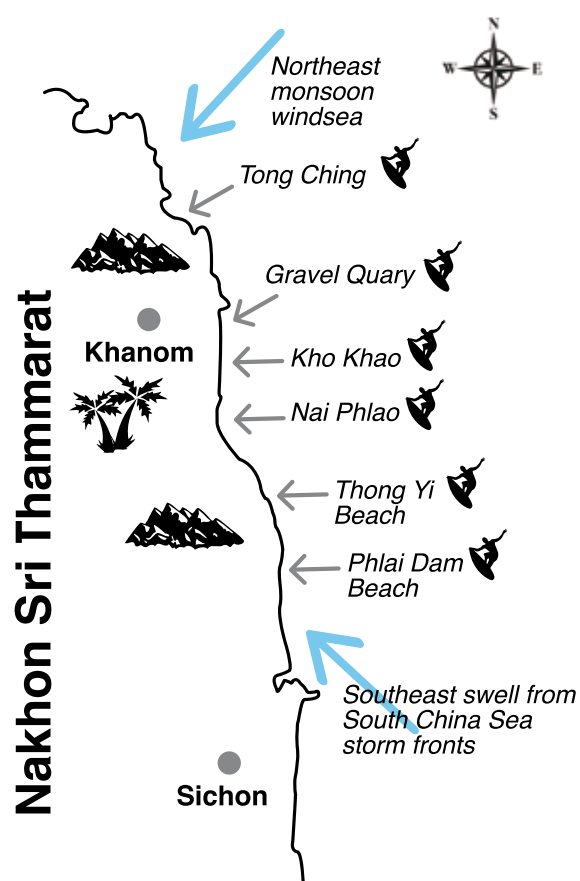
**Khanom** is the jewel of the continental Gulf coast and is characterized by "mountains at the beach." The area is one-of-a-kind Gulf coast surf zone, laden with coconut groves, secluded valleys, and about the **best surf on the Gulf Coast!**

Khanom is a Samui-like paradise of the Gulf of Siam, an old-style fishing village reminiscent of years gone by. Located where Surathani and Nakhon Si Thammarat meet and form a large elbow on the Malaysian Peninsula, the coast is speckled with beachfront bungalows which cater mainly to regional domestic tourists. Water quality in Khanom area is normally much better than most surfing sites along the continental coast of the southern Gulf.

Khanom can be a 1-day surf trip for the die-hard surfer. If you leave Phuket at 5:00 a.m., know a few short cuts on the way, and don't stop, you can be in the water at Khanom and getting barreled by 9:30 a.m.! Try **Gavels** (or **The Gravel Pit**) at the industrial-looking docks on north end of Kho Khao Beach for some of the best waves on the Gulf of Thailand. The peaks in front of the beach restaurants are usually best. As they don't see many surfers, the Khanom police may come and curiously watch you surf!

Further south is Nai Phlao Beach, a bright-looking white sand bay with any number of beach breaks. Venture on, up and over the cliffs to find Tong Yi Beach. Here, on the right day, are found pounding beach barrels for the tough-chested bodysurfer. Be sure to make friends with the local artist and owner of the property at "Tong Yi Camping."

On the right swell direction, Tong Ching Beach is step into the Gulf's fairytale past, where emerald-green waves crash on a broad and white sandy beach fronted by wooden bungalows fashioned from an old boat, and backed by a pristine jungle valley. Scenes from the pirate movie *Blackbeard* were filmed here.







## Songkla **SIMILA BEACH**

**Simila Beach can be ‘Gulf magic’ on the right day...**

Cape Simila Beach is a long and angulated sandy bay lined with tall and shady ironwood trees. The long windy waves at Simila seem to travel sideways down the beach. The best peaks are in front of the Golden Mermaid statue or try the barreling sections over the exposed rocks to her south.

From the story Phra Apaimanee by Sonthorn Phu, the Golden Simila Mermaid was created in 1966. She squeezes the water from her hair, representing the image of the Hindu-Buddhist earth goddess Mae Thorani. Today, she watches over the random surfer, which is great as there are no lifeguards at surf beaches of the Gulf!

Southeast swells push down the beach and can be somewhat protected from the prevailing winds. On big days, there are large cloud breaks well out to sea—but can you find anyone to paddle out there with you?

A series of beach breaks are found on the long beach to the south of the point, but this area is highly exposed to the prevailing onshore winds.







Laem Ta Chi

## Pattani LAEM PHO

Like the leg of a giant coconut crab, an enormous sand spit was formed in Pattani over the centuries by the northeast monsoon winds and ocean currents. This area picks up a lot of swell with the best surfing waves being in a large curved bay known as **Laem Pho**. If you like to surf alone, this is a good place to be. The scattered Muslim villages and shrimp farmers generally pay little attention to the odd surfer who shows up every year or so.

The peninsula curves around the city of Pattani to form an enormous natural bay and a safe haven for the traditional hand-colored wooden Korlae style fishing boats of the region. The seaward-side of the cape offers picturesque views of the southern seascape outlined by indigenous trees and plants. On a less aesthetic note, small shrimp farms dug into the soft sands dominate the area and contribute to the environmental degradation and water pollution issues of the area. The place name "Pattani" is actually means "**the beach**" in Patani-Malay language.

For the truly adventurous surfer, some of the deepest waters in the Gulf can be found around **Narathiwat** and off-shore sand bars to the south of the city can have large surf at times. Let us know at TSM if you're heading down there!





# Environmental Studies GULF OF SIAM

From my 3-year research on surfing in the Gulf of Thailand, it was established that there is a profound need for the conservation of surf beaches in the face of rapid and potentially irreversible environmental change—and further applied environmental studies are recommended to better understand the physical and human environments of surf beaches in the Gulf. Environmental studies, as an applied field ('applied' meaning that we engage in the study in order to solve problems), includes conservationists who seek the sustainability of coastal resources—together, surfers, researchers, and surf-researchers can serve to venerate Thailand's coastal surfing resources.

## Impacts on Coastal Surfing Resources

There are currently no social issues among surfers (localism) in the Gulf—but the Gulf surfer may find environmental concerns! My research found that indeed environmental studies are needed in order to address the many serious topics of the Gulf:

- Water pollution, especially chemical loading from agriculture and industrial sources. The Gulf is highly prone to these phenomena.
- Aquaculture, including shrimp farming (from large industrial farms to individual holes dug in the beach) which greatly affects aesthetics and water quality.
- Fisheries of the Gulf and related water quality issues from canneries to marine debris.
- Unprecedented coastal erosion is a key topic throughout the Gulf.
- Sedimentation in the shallow Gulf from regional rivers.
- Climate change: the Gulf has experienced a rise in temperature and a rise in sea levels, with imminent negative consequences to the Mekong Delta, coastal Bangkok areas (upper Gulf), and the southern provinces. How will this affect our surfing resources?



**SHRIMP FARMING ON THE SOUTHERN GULF COAST** is a significant topic in coastal pollution and coastal resource management.

## Gulf Factoids

- Covers some 320,000 sq. km. of ocean—from the mouth of the Mekong River (Vietnam) to the estuary of Malaysia's Kelantan River.
- Characterized by low salinity and high sedimentation from great regional rivers, such as the Chao Phraya, the Mekong, and the Kelantan.
- Lies entirely on the Sunda Shelf, which was exposed during the previous ice age (some 15,000+ years ago). In the millennia that followed, the Gulf was a strange and swampy marsh and was slowly submerged as sea levels rose.
- The Sunda Shelf demarks the **Wallace Line** (the eastern boundary of Asia's animal fauna).

## INFAMOUS TYPHOONS OF THE GULF OF SIAM

*Cyclogenesis, or the formation of storms in circular pattern, can produce typhoons with especially large and unpredictable waves. Typhoons (from Chinese "tai-feng" meaning 'great wind') are most likely to form in November, when cold spells strike the hot air in or near the Gulf of Thailand. This phenomenon can cause tropical depressions to transform into fast-moving typhoons.*

Gulf of Thailand typhoons are associated more with death and destruction than with happy surfers dancing on waves—and there are no documented reports of anyone surfing typhoon swells in the Gulf (please let our editor know if you have this story!)

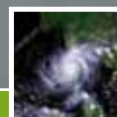
The 3 most infamous typhoons of the previous century all tracked from east to west, crossing the **Isthmus of Kra** and entering the Bay of Bengal. These storms are defined by enormous coastal storm surges, a characteristic of the shallow Gulf, which occur when strong onshore winds push seawater inland, resulting in the loss of life and property.

- **1962 (October) Tropical Storm Harriet** which swamped Talumpuk (Nakhon Si Thammarat) when a massive storm surge pushed up and over peninsula. The northern end of the Talumpuk was swept clean by 3 meter waves (6 meters in southern provinces) resulting in some 900 deaths, 142 missing persons, and 10,000 coastal residents left homeless. **Big surf (3 meters)** was reported at Huahin, Rayong, and Koh Chang.
- **1989 (November) Typhoon Gay** was the worst storm in the Gulf since Harriet. Reports include **11 meter waves in southern provinces!** 458 lives were lost in Thailand, while 600 seamen went missing and 200 fishing vessels were destroyed. A great storm surge was documented from Chumphon to Rayong.
- **1997 (November) Severe tropical Storm Linda** raised havoc in southern Vietnam and then entered the Gulf, bringing **big surf** and heavy rains. **4 meter waves** were reported in Huahin.

TYPHOON LINDA



TYPHOON GAY



## Coastal Cultures of the Southern Gulf

Like a checkerboard landscape, cultures and their temples change from one village to another when travelling in the south, reflecting Theravada Buddhism, Mahayana Buddhism, Chinese folk religions including Taoism and Matzu (the Goddess of the Sea), and a variety of stylish Mosques. The surfer will also encounter the coastal fishing cultures which include the Thais, the indigenous seafarers, the Chinese, and unique Islamic cultures.

## Cultural diversity of colorful fishing boats in the Gulf



Nakhon Si Thammarat



Songkla



Pattani



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# "GOING to The GULF ! NOT GOING to GOLF !"

Simila Beach - Songkha



Saichon Beach - Nakorn Sri Thammarat



Surfing the Gulf? Really?



Sakom Beach - Songkha