



NATIONAL MARINE SANCTUARIES

CELEBRATING 50 YEARS

Playing for Keeps: The Vitality of an Ocean Nation At Play

50th Anniversary Sanctuary Signature Articles

By Elizabeth Moore | July 2022

Photo: Having fun along the shores of Monterey Bay National Marine Sanctuary! Image: David J. Ruck/NOAA



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"It is a happy talent to know how to play."¹

Tag, hide-and-seek, hopscotch, blind-man's bluff, Marco Polo: how many outdoor games do you remember from your youth? We jumped in ponds in summer and made snow angels in winter, kite flying in the field and ice skating at the rink, tree-climbing and cloud-counting and puddle-stomping our way through childhood. We thought it was all just fun—and it was—but we were also preparing ourselves for maturity, for being healthy, sociable, engaged adults.

Play is ancient; archaeological evidence dating from the Paleolithic Age (from about 2.6 million to 10,000 years ago) and from many cultures includes balls of various materials, game boards and pieces, miniatures that likely served as toys, and depictions of both children and adults at play.² Play is universal, observed in the young of every society and in many of our primate cousins and other wildlife species, signaling that it has important evolutionary benefits.³ Play is important, with experts now understanding that outside play, including water-based recreation, is crucial for children's development, for our continuing physical, mental, and emotional health as adults, and as a growing segment of our national economy. Read on to learn more about how outside play, and the places where we play, shape us starting in our very earliest years.



Practicing balance skills atop the waves of Hawaiian Island Humpback Whale National Marine Sanctuary! Image: Bruce Sudweeks, winning entry in the category of Sanctuary Recreation in 2020's Get Into Your Sanctuary Photo Contest ([../photo-contest.html](#)).

"In our play we reveal what kind of people we are."⁴

A young girl flexes her knees and extends her arms on a surfboard atop a gentle swell. She's having a good time in the waves but she's also practicing her balancing skills. Physical learning from play like this helps develop motor skills, hand-eye coordination, and spatial mental mapping.⁵ Unstructured play allows children to safely experiment, interact with others, think creatively, solve problems, learn about themselves, and develop confidence and independence. Being outdoors additionally helps children engage in more exuberant types of playing and grow strong, healthy bodies.⁶

Hopping from one rock to another while tidepooling in Channel Islands National Marine Sanctuary involves balance and coordination, while reaching down to delicately stroke the spine of an urchin or leg of a starfish develops fine motor skills. Rowing a tandem kayak in Mallow's Bay-Potomac River National Marine Sanctuary involves balance too, of a different kind, and learning to coordinate with a partner. Running along the wave line on a beach of Olympic Coast National Marine Sanctuary teaches the overall sense of a body in motion and judging the arrival of the next wave to leap into helps with spatial understanding and timing.



Lending a helping hand in Monterey Bay National Marine Sanctuary! Image: Jerry Loomis, submitted to the Get Into Your Sanctuary Photo Contest in 2020.

"You were once wild here—don't let them tame you!"⁷

A child reaches out to help her sibling wade through the shallows. Cooperation is only one of several types of cognitive, emotional, and social learning from play that involves gaining problem solving skills, as well as skills related to observation, curiosity, and sensory experiences.⁵ Experts also point out that free-form play allows children to learn how to behave, socialize, and problem-solve with others, the types of skills that support the peaceful, civil social interactions that are at the heart of a healthy democracy.⁸ Aquatic exercises have additional specific benefits. Swimming has been shown to reduce anger, tension, and depression in adults⁹ and lower-impact physical training in water improves the mental and physical health of those who might have trouble with exercising on land. Recreational activities that include immersion in water, one expert points out, have numerous benefits, including lowering blood pressure, reducing the release of stress hormones, increasing blood circulation, and easing pressure on the joints.¹⁰

Building sand castles in Monterey Bay National Marine Sanctuary involves judging just how high that sandy tower can go and whether wet or dry sand is best for the courtyard walls. Playing pirates aboard a sailboat in Thunder Bay National Marine Sanctuary teaches social skills in settling disagreements over who gets to be captain and who has to haul the sails. Snorkeling in the shallow waters of Florida Keys National Marine Sanctuary encourages children to step outside their comfort zone to explore and appreciate their world in all its forms.



Learning about aquatic life in Mallows Bay-Potomac River National Marine Sanctuary! Image: Matt McIntosh/NOAA

"And forget not that the earth delights to feel your bare feet and the winds long to play with your hair."¹¹

A group of students peer with fascination at an aquarium full of fish. These kinds of spiritual and environmental lessons from play teach children about sustainability, diversity, and change, and grant them a sense of stewardship over our ocean planet. Gardens, forests, fields, beaches, and other outside environments provide deep sensory experiences and increase knowledge of the natural world, like the changing seasons, the cycles of life, and the passage of time. Humans particularly find environments with water—the ocean, rivers, lakes, even working waterfronts like canals and ports—highly attractive and more restful than landscapes without the presence of water, and specifically seek out water places for recreation and restoration.¹²

Going wildlife watching in Greater Farallones National Marine Sanctuary throughout the year shows a child how winter's migrating gray whales and wintering waterfowl give way to spring and summer's humpback whales and pupping harbor seals, and to autumn's feeding shearwaters and hunting sharks. Observing colorful sea stars, clams, urchins, barnacles, and limpets in the intertidal zones of Olympic Coast National Marine Sanctuary teaches children about the stunning and joyous diversity of life on our ocean planet. Seeing a whale breaching or a sea turtle swimming in Hawaiian Islands Humpback Whale National Marine Sanctuary creates a sense of awe and wonder that can be a life-long gift.

Fishing along the shores of Hawaiian Island Humpback Whale! Image: Matt McIntosh/NOAA

"Have regular hours for work and play; make each day both useful and pleasant..."¹³

A child throws a line out into the ocean in hopes of catching a big fish. He's having fun but the recreational fishing he's enjoying is a lucrative economic activity. Play is big business. The U.S. Bureau of Economic Analysis said that in 2020, even in the worst of the pandemic, the nation's outdoor recreation economy accounted for almost 2% of our GDP, a value of \$374 billion. Water-based recreation like boating and fishing was the most valuable, worth about \$30 billion in 2020.¹⁴

The pandemic urged more of us outdoors than ever before, the Outdoor Foundation reported late in 2021, with more than half of the U.S. population over the age of six taking part in at least one occasion of outside play. Some of that was no doubt due to the safety factor of being outside but the deep social and emotional difficulties provoked by a global

pandemic had many of us seeking the authentic and positive experience that being in nature can provide. 2020 saw nearly 55 million Americans engage in recreational fishing. Bird watching and wildlife viewing were also big draws, with 15 million and 21 million participants each. Other water-based activities continued to be popular: canoeing and kayaking (22 million participants), snorkeling (7.7 million), surfing (3.8 million), stand up paddle boarding (3.7 million), sailing (3.5 million), scuba diving (2.6 million), and windsurfing (1.3 million).¹⁵

Practicing yoga beside Olympic Coast National Marine Sanctuary! Image: Karlyn Langjahr/NOAA

"We don't stop playing because we grow old; we grow old because we stop playing."¹⁶

A dozen adults ease into a lunge yoga pose, reaching skyward and enjoying a beautiful day beside the ocean. Though some might not consider yoga the same kind of play they enjoyed as children, it still offers similar benefits. In the last several decades, scholars and experts have increasingly noted how important play is for us as adults. Emotionally and socially, we build stronger relations with family, friends, and colleagues when we engage in sports and experiences that foster trust. Taking part in new kinds of recreational activities boosts our creativity, helps us get into that flow state important for innovation, and encourages the neuroplasticity that helps protect our brains as we age. Acquiring new skills or achieving a new benchmark as we play boosts our confidence in other areas of our lives. Having fun at any activity you find enjoyable also has important health benefits by reducing your stress. Sports and outdoor activities also support physical fitness and health, promote better rest and sleep, and increase energy levels.

The U.S. Department of Health and Human Services recommends (https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf) that healthy adults get at least 150 minutes of activity a week to realize benefits like these, with a mix of moderate and vigorous intensity aerobic, balance, and strengthening exercises. So go ahead! Join nearly four million Americans riding waves, including at these top-notch surf spots (</visit/surfing.html>) in national marine sanctuaries. Become a one-percenter when you are certified to dive, including in these gorgeous sanctuary dive destinations (</diving/>). Be in with the in-crowd of those who love to fish, including in these not-so-secret fishing spots (</visit/fishing/>) in sanctuaries. Building your life list of invertebrates, birds, and other animals? Check out these amazing sanctuary places for birdwatching (</news/may18/birds-across-the-nmss.html>) and wildlife viewing (</visit/things-to-do.html>). Or if you're a history buff, explore the virtual and real-life trails offered by the sanctuary system: the Outer Banks Maritime Heritage Trail (<https://monitor.noaa.gov/obxtrail/>), the Great Lakes Maritime Heritage Trail (<https://thunderbay.noaa.gov>), or the Florida Keys Shipwreck Trail (<https://floridakeys.noaa.gov/shipwrecktrail/?s=heritage>). Check out even more ways (</visit/things-to-do.html>) to enjoy sanctuaries so you never have to stop playing!

50th Anniversary Sanctuary Signature Articles

About this series: The National Marine Sanctuary System celebrates its 50th anniversary (*/50/*) in 2022. As one of a number of engagement efforts, we're taking the opportunity to do a series of in-depth feature articles about different aspects of who we are, what we do, and why we do it, many of them touching on subjects we don't often talk about in our outreach efforts. But when you reach the age of fifty, you're allowed to be a bit introspective! Each month we'll release a new sanctuary signature article. Read the earlier entries in this series.

Wild Sanctuaries: Wildlife, Wild Places, and Wild Being (<wild-sanctuaries.html>)

(<playing-for-keeps.html>)Playing for Keeps: The Vitality of an Ocean Nation At Play

The Making of a Maritime Nation (<the-making-of-a-maritime-nation.html>)

Presidents and Parks: The Untold Story of the Ocean Legacy of the Nation's Leaders (<presidents-and-parks.html>)

Storied Seas: The Names and Tales of Sanctuary Places (<storied-seas.html>)

Depths of Courage: Heroism at Sea and in Sanctuaries (<depths-of-courage.html>)

[The Hidden Figures in the History of the Sanctuary System \(hidden-figures.html\)](#)

[You Have to See/Sea This! A Sanctuary History of Visual Engagement \(you-have-to-sea-this.html\)](#)

[The Power of Wow: A Half-Century of Discovery in Ocean Parks \(the-power-of-wow.html\)](#)


[Communion: Ocean and Creativity \(communion-ocean-and-creativity.html\)](#)


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