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Manatees in Florida

The Manatee Year

Piety the manatee was resting in the warm waters of Three Sisters Springs in Crystal River, as she had done for many decades, returning every year like clockwork to take advantage of the clean, warm, flowing artesian spring water. On this day in March she sensed a bump against her lower flank. She woke from her slumber to assess the situation, expecting to see another annoying manatee interrupting her rest while investigating her as she slept; but there were no other manatees close by. She realized that the pang was likely from the baby manatee in her, indicating that the day of birth would be coming soon.

Piety had spent the previous summer out on the Gulf of Mexico's grass flats feeding on the rich, lush seagrass. During her 12-month pregnancy she had amassed some weight that would be necessary for helping her baby develop and preparing her for the long winter before the baby was due. The kicking in her swollen belly reminded her that the due date was getting close. This past month her two teats (one behind each of her front flippers) also were getting sore due to the buildup of colostrum and milk in her mammary glands. Additionally, her expanding girth made it essential that she stay in deeper than normal water and created more drag in the water while swimming, making her tire easily. With the extra weight gain, and the baby dropping closer into the birth canal, she looked pregnant too. In April, the days became longer, providing more sunlight each day to help warm the coastal waters and enrich the aquatic and marine plant growth. April would be a good time for her to complete her pregnancy.

With the warmth of summer approaching, Piety spent more time outside of the spring feeding. The birth was imminent and she started to search for an appropriate calving site. She visited areas that were quiet, away from disturbances made by noisy humans, and where other manatees would not interfere with her delivery. She found a quiet, dead-end remote canal. In her long life she had used this place before for some of her 11 previous deliveries. She found this spot proved ideal because of the lack of people, noise, and activity—distractions that would interfere with her birth and the eventual bonding with her newborn calf. She was not too worried about alligators, which were common, and Piety had always been careful to keep her calves away from them in the past.

On a warm April day, Piety gave birth to her baby. This newborn was the 12th baby she had successfully brought into the world, and a male (that biologists would later name “Buddy”). All appeared to be going well. The tail emerged first, which proved to be good. She had had a previous birth where the head of her newborn came out first. Piety was very worried on that day as this type of complication is risky, but in the end it worked out okay. Her new addition to the world plunged into the aquatic environment in a short time. She hurried over to her calf and nudged him to the surface. As the calf broke the surface, his tiny lungs filled as he gulped in some fresh air. Soon the two bonded with vocalization cues, rewarded with bouts of nursing that would secure their bond on days in the future if they were separated. For two years, Piety would dedicate her life to nurturing her baby, as she had done with all her other calves before. The young boy was soon nursing regularly from his mom and always interrupting the rest that Piety required, but she was reassuringly always there for him.

After a couple of weeks, the pair departed the canal together. The calf, always at her side and reassured with occasional vocal cues, kept their bond cohesive. Piety was hungry again and would need nourishment to maintain her milk supply, necessary for the growth of her baby. It was time to find food and the journey would be long. Piety enjoyed the open space out on the expansive shallow flats of coastal Florida, and especially the abundant vegetation. With the accustomed noises on the flats, Piety always found an inner peace and comfort in the open spaces that she now would share with her baby. However, on occasion there were menacing boats; but at least the people did not get into the water, and even the number of other manatees in

the area would be fewer due to the open expanse. Sometimes though, Piety would encounter other manatees and they were always very curious of each other. One day, a young manatee approached Piety while she fed on the seagrass. The manatee came up to her side and attempted to nurse. Piety quickly moved away, knowing she must save her milk for her calf. Soon, however, Piety realized that this visiting manatee was one of her previous calves. She would have allowed it to nurse if it were not so soon after the birth of her new calf.

Summer days had uncertainties, where winter days had routines. Because of the uncertainties, Piety and other manatees had grown weary of humans, always leery of their unpredictable behavior. Piety would teach her calf to be cautious around people while off the coast, but her acceptance of them would diminish when she ventured back into the springs to drink fresh water. When Piety was younger, she did not trust the swimmers, but over the years in Crystal River she learned to accept them, which resulted in her toleration today. Unlike the fear she had as a calf when encountering people, Piety had changed and she had observed this gradual change in the behavior of her calves as well. Buddy was no exception. He was always curious, but also cautious and calculative. He would allow people to see him, but was annoyed at times when they would not leave him alone. There were times when he needed his rest too. People also tended to come out in the day, and so much of the manatees' life revolved around traveling and feeding at night. There was safety when people were not around, especially when impatient boaters would speed over the shallow flats. The manatees were not always able to get out of the path of the speeding boats. This had often happened to Piety, and she had the old healed scars to prove it.

As the weather became cooler and the days shorter, Piety knew that winter was approaching. She would need to get Buddy into the springs and would start that process before it got too cold. Piety considered their travel to be one of the most important things to pass on to Buddy—the need to determine when and where to seek out warm water. The warmth was their lifeline and without it they would suffer, or even die. If they remained in the coastal waters, they would get too cold, then infections could ensue, so to avoid lowering of the body temperature they would often swim. Manatees are marathoners and swimming results in raising their core body temperature. But there are limits to how long they can maintain this swimming be-

havior without the fuel of nourishing vegetation. To avoid excessively cold waters and exhaustion, Piety and all moms err on the side of caution and arrive early at warm water sites. Piety set a course for Crystal River.

Piety liked the safe waters of Crystal River. There she could rest in peace knowing that the warmth was always reliable and in sanctuaries where humans were not allowed near them. Piety's playful calves, and Buddy was no exception, often would mingle with the swimmers while she slept. At first Piety was worried about this, but later she realized that these people-manatee interactions would keep her baby occupied while she rested. Buddy would anticipate the morning activity when boatloads of curious people would flock to the warm water sites. Donned with masks, snorkels, and thick suits to keep them warm, these human invaders were captivated by the beauty of manatees. Many manatees also were transfixed by these often awkward, novel objects in the water, while Piety rested nearby.

Befitting is this rendition from the first edition of this book:¹

On a clear cold winter morning the silence in the water is broken by the sound of an approaching motor boat. It grows louder as it approaches a group of sleeping manatees. This noise is becoming more and more common these days. One manatee, Piety, briefly takes note, but continues resting in the warm spring waters of the sanctuary with her young calf. She is old and used to this habitual activity that is now part of the manatee life. Buddy, however, does not understand and curiosity transfixes his attention. He wants to investigate, and mom wants to sleep.

As the boaters toss their anchor into the water, several manatees nearby are startled. Soon they settle down and continue their business of resting and cavorting. The excited sounds of the people on the boat are also heard by the manatees. They talk of how this will be an awesome experience and are overly jubilant in their anticipation of a dive with wild manatees.

One of the divers remembers reading that manatees are gentle. But in the clear water they look large, ominous and threatening (Fig. 1.2). He is a bit concerned that if he were to get into the water, the manatee might bite him or bump him or hurt him. But his curiosity gets the better of him and he dons his mask and snorkel and slowly enters the water. To him the water is cold.



Figure 1.2. Swimmer with manatee in Three Sisters Springs, Crystal River, Florida. (Photograph by Robert Bonde, courtesy of the U.S. Geological Survey.)

To Piety's calf the water is warm. It is good to wake up in the warm spring waters, since the temperature in the Gulf of Mexico is very cold. Last night mom took him down the river so she could feed. He occasionally eats the plants but prefers mom's milk. Buddy usually accompanies her while feeding at night when the boats are not as numerous on the water. It is a good time and the calf likes to travel in the calm, quiet, dark waters. He feels safe with his mother.

The diver tries to focus in the water. It is clear up close, but distances are cloudy and it is like swimming in a fog. The calf turns his attention to the boat that now has a swimmer in the water. He hurries over to this novel object; an object that is awkward and spends too much time near the surface. The surface is a place the calf has been trained to associate with peril. Within seconds the diver and manatee meet. Eyes transfixed on one another; their mutual interest is love at first sight!