

spark” may be compared to engagement of the learning cycle; the first of the five “E’s”, “Holistic interpretation” reminds one of constructivism and “reader response,” our learning colored by whole life experiences; “Enough is Enough” demonstrates that simplicity, like good experimental design, is elegant (and parsimonious); and “Importance of the Story” encourages the treatment of knowledge imaginatively, by analogy, metaphor and anecdote. While Tilden focused on creating different interpretive programs for youth, Beck and Cable extend the need for specialized interpretation throughout the life span, recognizing a growing population of seniors. They even advocate inclusion of focused efforts toward babies and toddlers, benefiting the parent-caregiver-child relationship as well as introducing the very young to nature through their senses. Discriminating use of eloquent quotations sets the stage for personal reflection on each principle. Particularly insightful are the “boxes” of actual vignettes from interpretive experiences thoughtfully inserted in each chapter, giving further evidence of the veracity and effectiveness of the principle being considered. Their attention to common, but ineffective, practices, as in asking an audience (or class), “Do you have any questions?” is welcome and provocative in forcing reflection on traditional methods.

The final four chapters – “Attracting Support and Making Friends,” “Interpreting Beauty,” “Promoting Optimal Experiences,” and “Passion” – took me back to a modest but entirely successful interpretive site on the Pacific, the Cabrillo Marine Aquarium near Point Fermin north of Long Beach. Tiny and obscure compared to the nearby Long Beach Aquarium, Cabrillo’s was staffed by an energetic and well-informed cadre of dedicated aquarists who created a warm and caring atmosphere, where each visitor was treated as a special guest and friend and introduced to the extraordinary natural beauty of this slice of coast. Simple, well-designed exhibits showcased adaptations of often overlooked

native animals; interactive “games” engaged the children; and seating was strategically provided for those who moved more slowly or who simply wanted time to contemplate. An evening on the beach to watch the grunion run linked the imaginatively built, low-cast exhibits with the authentic environment and left us with an enduring memory and newly forged tie with a previously unknown realm. At the close of our visit, our donations helped this interpretive site continue giving its “gift.” And, this is, in the conclusion of the authors, the ultimate goal of interpretation: the gift of place that we, as awed visitors, took with us, in our hearts and minds.

An appendix offers resources for readers to explore; notes provide extensive reading on specific principles; the bibliography is expansive and revealing. “About the Authors” pictures Beck and Cable at Point Loma and, ironically, the Cabrillo National Monument, a hundred miles due south of my favorite interpretive site. In a conversation with Cable, he explained that the photograph’s location had special meaning as it showcased both the natural and historical significance of the region. While it might have been serendipity that took me to the Cabrillo Marine Aquarium, the essence of what interpretation can and should be is no fortunate piece of luck, but can be found in **Interpretation for the 21st Century: Fifteen Guiding Principles for Interpreting Nature and Culture.**

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CHILDREN’S SCIENCE

SHARKS

Sharks! Strange and Wonderful. By Laurence Pringle, Illustrator Meryl Henderson. 2001. Boyds Mills Press,

815 Church St., Honesdale, PA 18431. 32pp. ISBN (1-56397-863-6). \$15.95.

The picture of the tooth-filled mouth of a Great White Shark on the cover of **Sharks!** will make this book irresistible to young children. On each page readers will linger over colorful, labeled illustrations of sharks in their natural setting. These illustrations help the reader visualize the accurate and age appropriate explanations the text provides for the surprising variety of appearances, behaviors, structural adaptations, and ecological roles found in sharks. Adults who read this book with children will be rewarded with good, timely, scientific, and ethical questions that will come to the minds of young readers as they encounter the world of sharks through this excellent book.

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INSECTS

Crickwing. By Janell Cannon. 2000. Hartcourt, Inc. (525 B St., San Diego, CA 92101). 48 pp. Hardback \$16.00.

If you enjoyed *Stellaluna*, you will love Janell Cannon’s new book, **Crickwing.** This is a wonderful tale about a cockroach, leafcutter ants, and the ever-fearsome army ant. Written for 6 through 9 year olds, this fantasy introduces children to some interesting insect behaviors in a tale that can be enjoyed by all ages. Beautifully illustrated, the author weaves the biology of three insects into a story with a delightful ending. For those readers who want more information on cockroaches and ants, Cannon has included notes on each at the end of the book. What an enchanting way to encourage young children’s observations of the natural world around them!

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