
RESOURCES & ENVIRONMENT

*Taking Vengeance
on the Beaver*

"The War Between Indians and Animals"
by Calvin Martin, in *Natural History*
(June–July 1978), Box 6000, Des Moines,
Iowa 50340.

The pre-modern American Indian is widely viewed as a noble savage who lived in harmonious balance with nature, taking from it only what necessity demanded and respecting animals and plants as fellow spiritual beings. A new look at the historical record by Martin, a Rutgers historian, shows that at certain periods the Indian perceived his relationship with nature to have gone awry and engaged in a fearful slaughter of game that amounted almost to a declaration of war.

A striking example of this behavior, Martin writes, occurred in eastern Canada in the late 15th century just before there was major direct Indian contact with whites. Diseases such as smallpox and influenza, brought by European fishermen and voyagers to the Canadian shore, preceded the newcomers inland and decimated aboriginal populations totally lacking in immunological resistance.

The Indian, believing that game animals possessed the power to inflict disease, and as yet unaware of the white menace, felt that the game had broken the traditional "compact of mutual courtesy" between animals and men. For some obscure reason, the wildlife had become angered and had unleashed their most potent weapon against man. In response, the Indians of the Northeast counterattacked with a vengeance. As some Micmac Indians termed it, they were "making war upon the beaver."

When the French and British fur traders arrived on the scene with manufactured goods to exchange for furs, the psychological basis for near-extinction by Indian hunters of many varieties of Canadian wildlife had already been established.

*The Battle
of the Fibers*

"Cotton Versus Polyester" by T. Leo van
Winkle, John Edeleanu, Elizabeth Ann
Prosser, and Charles A. Walker, in *Ameri-
can Scientist* (May–June 1978), 345 Whit-
ney Ave., New Haven, Ct. 06511.

Environmentalists in recent years have extolled the benefits of "natural" processes and products over "synthetic" ones—especially those man-made items derived from such nonrenewable resources as petroleum. But in terms of energy consumption, it is not at all clear that cotton, a "natural" fiber, is less costly to society than "synthetic" polyester fibers made from oil and gas.

An analysis by van Winkle, a Catholic University engineering professor, and three colleagues, compares the energy consumption involved

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in the full lifetime cycle of a cotton shirt and a shirt containing polyester fibers. While it takes considerably less energy to produce cotton lint than polyester fiber (613 kWh per 100 lbs. versus 2,158 kWh for the synthetic), and 25 percent less energy to make a cotton shirt than one containing synthetics, the advantage is lost in the wearing and maintenance (washing/drying/ironing) cycles. The total energy requirements for the manufacture and energy-intensive maintenance of a cotton shirt is 115.5 kWh, and for the more durable 65/35 polyester/cotton blend shirt it is 72.4 kWh.

When land-use factors are considered, the advantages of synthetics become even more pronounced. Van Winkle and his research associates estimate that if cotton were to replace man-made fibers in U.S. textile production, it would require a 35.6 percent increase in total cotton acreage. "With the increasing world population requiring increased food supplies," the authors contend, "it would be well-nigh impossible to divert this much prime cropland from food to cotton production."

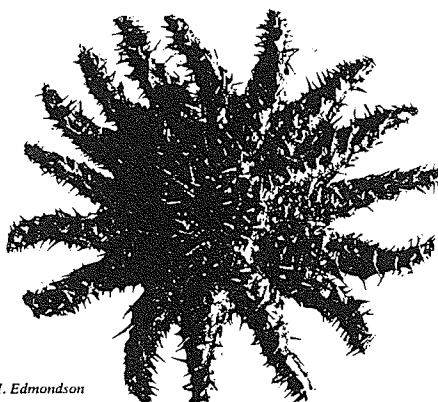
Debunking the Starfish Myth

"The Crown-of-thorns Crisis in Australia: A Retrospective Analysis" by Richard A. Kenchington, in *Environmental Conservation* (Spring 1978), Elsevier Sequoia, S.A., P.O. Box 851, 1001 Lausanne 1, Switzerland.

Inadequate research, poor sampling techniques, and the eagerness of the news media for a sensational story combined to create the great crown-of-thorns starfish "menace" of the late 1960s and early '70s.

So says Australian marine biologist Kenchington, who suggests that the advent of scuba-diving technology led to greatly increased exploration of Australia's 2000-kilometer-long Great Barrier Reef and the dis-

Acanthaster planci, measuring up to two and a half feet across, envelops living coral by extruding its stomach through its mouth.



Photograph by C. H. Edmondson