Butterflies Alive! at the Milwaukee Public Museum
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Maybe it was the promise of spring after a long Midwestern winter. Maybe it was the fact that it was Good Friday, and thoughts of rebirth and transformation played closer to the surface than usual. Maybe it was the squeals of delight from urban youngsters, encountering nature up close and personal. But I found myself enthralled during my visit to Butterflies Alive!, a deceptively simple yet powerfully evocative exhibit at the Milwaukee Public Museum.

The 7,500-square-foot temporary exhibit, running through September 1, achieves what most natural history exhibits only dream of. It immerses visitors in its subject matter. It allows them to interact fully with the exhibit and each other. It brings the collections quite literally to life. And it does so in a way that is thoroughly enchanting, engaging, and enjoyable.

The exhibit centerpiece, conceptually as well as literally, is a 30-by-40 foot vivarium, or butterfly house. This room-within-a-room is surrounded by didactic displays of specimens, models, graphics and interactive elements. Of course, most visitors make a beeline for the butterflies.

The experience is transformational. Even before entering the vivarium, a mood of calm, created by the deep blue of the gallery's outer walls and soft New Age music, envelops you. Inside, you discover a recreated garden with a circular path around a flower bed, other greenery on the periphery, benches, two chrysalis-hatching stations, and a soothing if somewhat tacky-looking waterfall.

As your eyes readjust to natural light levels, you sense shadows moving overhead. You find yourself surrounded by some 250 to 300 butterflies, floating a mere arm's breadth away and often landing on fellow visitors. (The insects seem especially drawn to elderly ladies with floral perfume,
and patrons wearing the green and gold of the Green Bay Packers.) I've been to butterfly houses from Philadelphia to Melbourne, and have never seen as much interaction between visitors and animals, educators, and each other.

The small space puts visitors in direct contact with the beautiful, delicate insects, and they are clearly impressed. The faces of small children display the kind of wide-eyed wonder one sees outside department store Christmas windows (another fairy tale tableau come to life). Older visitors instinctively flinch at any insects fluttering too close. But this aversion soon melts away, as they progress through the three stages of the butterfly experience: "Look, there's one on that leaf!" "Look, there's one on her!" "Look, there's one on me!"

As zoo staff well know, visitors crave interaction with live animals. They'll spend all day calling, waving, tapping on glass, trying to elicit a response (often to the detriment of the creatures). Here, all one needs do is stand still, and the exhibit comes to you. The "Do Not Handle" signs are widely ignored as visitors pose like statues, arms and fingers extended, trying to coax the butterflies to land. It is the simplest activity imaginable, and the most rewarding.

I confess, I was initially concerned for the safety of the live animals. How would they fare in a roomful of agitated children? Not too bad, it turns out. When a butterfly lands on a visitor the universal reaction, from the smallest child to the burliest leather-clad Harley man, is to freeze so as not to disturb the insect. And should a child make a sudden move towards a butterfly, evolution has equipped the Lepidoptera with means of eluding predators. It merely flutters away, its erratic flight confounding all attempts at capture.

Of course, an exhibit is more than a free-form fun house. It is meant to educate, directly or indirectly. Sue Borkin, Curator of Invertebrate Zoology and Project Coordinator for Butterflies Alive! listed the exhibit's educational goals as: increase sensitivity to the world around us; species diversity; butterfly biology; Museum research and collections; and creating a fun learning experience.

Much of this agenda is addressed in the didactic portion of the exhibit, a series of stations
along the outer wall of the gallery. The eight sections -- What Is A Butterfly?; Survival; Diversity; Evolution; Conservation; Butterflies In Our Lives; Cycle of Life; How Butterflies Sense The World; plus a puppet theater where children can act out the metamorphic cycle -- seem to cover all the bases.

While there is a preferred circular path, the visitor is free to create his or her own experience. (My colleagues well know my distaste for forced-march exhibits.) And contrary to voices-of-doom predictions, visitors do not ignore these displays. Most seem inspired by their recent close encounter to learn more about butterflies. Supplemental handouts are available on butterfly gardening, watching and conservation, appealing to a variety of audiences.

The sections on morphology and behavior seemed to work the best, as they lend themselves to 3-D display. Labels throughout are short, well-written and reader-friendly. Graphics seem to pop off the walls. Designers Art Shea and Nancy Kruschke have done an excellent job, choosing bright colors to hold each small section together and differentiate it from the next. Silk plants extend the garden atmosphere beyond the vivarium walls. A cafe allows visitors to rest outside while still watching the activity within.

Though the vivarium can hold up to 80 people at a time, Museum staff limit the crowd inside to about 40, creating a more enjoyable experience for visitor and visited alike. The presence of staff also reduces the need for intrusive barriers. (And here I must mention the friendly and helpful guest services staff. Milwaukee has always had exemplary visitor relations -- second perhaps only to the Rock 'n' Roll Hall of Fame -- and in a popular attraction with significant crowd-control and information needs, the difference really shows.)

This is a staff-intensive exhibit. In addition to visitor services, the exhibit makes heavy use of docents and volunteers. Interpreters, stationed in the vivarium at all times, are kept busy answering questions and pointing out butterfly behaviors as they occur. (As Jim Kelly, Director of Exhibit Programs, states, "A live person is the best interactive.") Wireless microphones allow all to hear.
Museum botanists maintain the central nectar garden, while an outside firm tends the other greenery. Both avoid chemicals which may harm the guests of honor. Once a week, all plants are cleaned of butterfly eggs. (The last thing the Museum wants is a room full of hungry caterpillars).

The Museum contracted with butterfly farmers throughout the U.S. to supply 25 North American species, seven from Wisconsin. Obtaining the necessary permits proved to be a headache -- butterflies are classified as "plant pests," and cannot normally be transported across state lines. (This precluded the use of any tropical species, an omission which does not diminish the visual impact of 300 fluttering butterflies.) The mix of species will change over the year to reflect those currently "in season."

Whereas most institutions display live butterfly in outdoor greenhouses, Milwaukee built their vivarium indoors -- no easy feat, considering the light, humidity, heat, and UV levels required to keep plants and insects alive are all at odds with normal conservation standards. Not to mention the usually-unwelcome insects themselves.

The in-house design team, working with the trade-show firm Derse, built an isolated chamber recreating the environment of a Midwestern summer's day. Two sets of heavy vinyl stripping at each doorway allow visitors to enter and exit while keeping critters inside. Transparent walls, filtered and insulated, keep the internal environment internal while letting visitors outside the vivarium see what's going on.

While no front-end or formative evaluations were conducted for this project, the exhibit team did make use of studies done for other exhibits which also tried to "bring science to the Museum floor." The Museum will do summative evaluation of Butterflies Alive!, in part to determine how well they achieved their educational goals. Already the team is tweaking the exhibit; the microphones were added during the first week.

Of course, my review is not without its quibbles. Many labels are not informative enough. The distinction between species and breed; the function of mimicry; the definition of plant pest -- all were glossed over. And while most of the design was good, a few IDs appeared to be downy-
gray-on-ecru, and thus nearly invisible.

Speaking of invisible, I could find no instructions for the two interactive computer games (off-the-shelf units from the Smithsonian). A computer hooked up to the Web allowed access to only one site on Monarch butterflies, clearly underutilizing this technology. (Tellingly, the most popular interactives were microscopes which permit visitors a close look at real butterflies.)

Large models on butterfly feeding mechanisms were placed in the "What Is A Butterfly" section, when they belong in "What Does It Take To Survive?" A strikingly life-like, 100x enlargement of a praying mantis and a moth (Milwaukee has a well-earned reputation for spectacular exhibitry) had no visible interpretation. And a display of cultural artifacts with butterfly motifs was silent on the insects' cultural meaning.

My biggest disappointment was the section on the Museum's butterfly collections. As readers of Museum-L know, I question the relevance of self-referential exhibits. This display, relying on videotape interviews with staff scientists to explain the purpose and importance of collections-based research, was no better than average in reaching a profoundly disinterested audience.

But these are fairly minor issues. Overall, Butterflies Alive! is a rousing success, both for the visitors who clearly enjoyed their close encounter with the Lepidoptera, as well as for the Museum, which hoped to inspire awareness, interest, and sensitivity towards the natural world. In his book Cosmos, Carl Sagan stated "We only protect what we love, and we only love what we understand." Clearly, this exhibit promotes and love and understanding of nature. As I left the vivarium, I overheard the two teen-aged girls ahead of me enthusiastically gush, "That was so cool! We have to look for those in our yard!"