When Is A Label Not A Label? Labelling Animal Life As It Happens

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What's the best way to help people explore the dynamic nature of live animals in an aquarium and then connect that to a wild environment? This is probably one of the biggest questions faced by interpretive staff in any zoo or aquarium setting. In order for the visitor to take away this message of animals and ecosystems, they must spend time watching the animal in the exhibit. The Vancouver Aquarium's innovative approach to interpretation in the public galleries helps visitors explore the dynamic activities within the Aquarium and forge concrete links to the wild environment.

Quick-change info boards are an integral part of our interpretation approach. Through quick-change info boards our visitors become animal watching experts, which is the first step to helping visitors better understand the dynamic nature of animals. This paper looks at what these quick-change info boards are and how the Vancouver Aquarium and our visitors use them.

The Vancouver Aquarium achieves its mandate to affect conservation of aquatic ecosystems through many different routes, one of which is to provide learning opportunities for our general public visitor. The Vancouver Aquarium is unique in that it has an Interpretation and Exhibits group whose primary responsibility is visitor education. Naturalists (educators who work in the public galleries) and exhibit designers facilitate interesting, educational experiences for the visitors through oral and written interpretation.

Our Interpretive Approach

Our interpretive approach has taken visitor education to a new level. In the past, the Vancouver Aquarium worked with regularly scheduled activities, talks, animal feedings and shows. Our approach was based on a transfer view of knowledge, with an emphasis on content from textbooks and scientific literature. With this approach, Naturalists were portrayed as experts and visitors were expected to passively absorb information whether it was relevant to them or not. It is very difficult for interpretive staff to maintain this style in a facility with more than 8,000 constantly changing animals without their presentations turning into "canned" speeches. The emphasis has evolved from the presentation of factual biological information to an experience in which visitors actively participate in the process of science through animal observation and the exploration of issues

and concepts associated with ecosystems. Our staff of full time professional Naturalists can achieve our interpretive goals relatively easily through oral interpretation. New challenges begin when we attempt to reach our visitors through non-human means. The Interpretation and Exhibits group has developed written interpretive strategies to help our visitors have a more enjoyable experience and to help the Aquarium reach its mandate.

At the Vancouver Aquarium, visitors are exposed to two types of written interpretive materials: 1) fixed, permanent information presented in the form of graphics, handouts and labels which encourage visitors to watch animals by providing them with interesting animal features to look for, animal identification, and basic natural history information and 2) current, changeable information about wild and Aquarium animals presented through FAXES and quick-change info boards.

These quick-change info boards, designed to encourage visitors to watch animals, provide visitors with "peeks" into the changing lives of the animals on a day to day basis. This unique innovation consists of a number of portable handwritten boards moved throughout the Aquarium in response to changes that are happening that day. These quick-change info boards are written by Naturalists based on personal observations, daily animal updates from animal care staff and information about wildlife events around the world. In fact, so much information comes into the Naturalists' office that it is much like a newsroom. This information flow requires the Naturalist to revise the information on the quick-change info boards on a daily and sometimes hourly basis to ensure that they are still relevant to the animals' activities. The handwritten nature of the quick-change info boards enables Naturalists to update the boards easily and quickly.

This unique approach keeps our Naturalists and over 800,000 visitors per year in touch with the most current happenings about animals, animal care staff and wildlife research activities in the Vancouver Aquarium and wild marine environments. The complete interpretive experience, combining oral and written interpretation, is designed to achieve five main goals:

(1) To facilitate an enjoyable visitor experience.

A major reason that people visit a zoo or aquarium is to have fun with family or friends (Milan and Wourms, 1992). It is essential that our interpretive approach meets the needs of our visitors by learning with them in their social group.

(2) To help our visitors enhance their animal observation skills.

Naturalists and quick-change info boards model the use of animal observation skills. Modelling these skills encourages visitors to use the same techniques to continue their own discoveries of animal events unaided by a Naturalist or quick-change info boards.

(3) To be relevant and interesting to visitors.

In informal learning environments such as the Vancouver Aquarium, learners (visitors) are intrinsically motivated and reinforced (Bitgood, 1988). The learning experience must be intriguing enough to draw visitors' attention to it.

(4) To help visitors better understand and appreciate the changes in animals' daily lives.

With our approach of interpreting animal events - births, animals courting, animals guarding territories—as they happen, Naturalists and visitors can respond quickly to interesting events. For visitors to better understand and appreciate changes in animals's lives, they must experience a variety of these changes. This is very difficult for the typical visitor who may only watch an animal for a few seconds, unless they have some additional motivation.

(5) To help visitors better understand and appreciate the wild environments.

It is very difficult for visitors to see beyond the exhibit walls. For visitors to develop a more realistic understanding of ecosystems (versus the nature as "Garden of Eden" portrayed in many areas of our society), and reach the Aquarium's mandate, it is crucial for them to associate what they see in an exhibit with the real ecosystem.

Quick-change info boards highlighting the midas cichlid exhibit are a good example of how these interpretive "tools" fit our five goals. Midas cichlids frequently rear batches of young fish in this exhibit. This makes it a great exhibit to experience the truly dynamic nature of fish. All of the fish behaviours associated with raising young fish can be seen. Unfortunately, visitors often miss this excitement because they do not know what to look for. This is where quick-change info boards are most effective. Quick-change info boards coach visitors to look for midas cichlids courting, parents guarding and caring for eggs and young, and the young fish becoming independent. We have used a series of quick-change info boards to follow the growth of different broods of young fish (Fig. 1).

Evaluation

Our first sign of success was comments from our visitors. Comments similar to the ones expressed in this letter from a visitor about the experience he had with his young son at an exhibit with breeding midas cichlids have became common place. He wrote:

"...My three year old son, who takes after his Dad, has very little patience and fulfills the requirement of spending no more than 3.5 seconds at any exhibit (with the exception of turtles, sharks, and

snakes). I never minded this as I always enjoy a peaceful walk through the aquarium. However now that I have the opportunity to do my own "interpretation" even I am paying more attention. I stopped and read the sign which indicated that new baby cichlids had hatched. After I read the sign I stopped and looked at the tank and mentioned it to my son. He was ecstatic! He was truly fascinated by the small animals and the fact they were babies. There is no doubt that we would have missed this exhibit entirely had there not been the signs indicating what to look for.

After the experience of observing the baby fish I now keep an eye out for interpretive signs. This has increased my viewing pleasure and knowledge considerably. Lest you think I am alone in my view I was fascinated to observe that a number of people felt they would have missed the exhibit without the interpretive sign."

We frequently highlight fish hatching with quick-change info boards from early spring to late summer. At times, there are more fish hatching than we can keep up with. This leads us to the second stage of visitor feedback. Now we hear from our frequent visitors (Aquarium members) about exhibits that have 'baby fish' but no quick-change info board. Visitors are discovering changes in individual animal's lives on their own and then showing their discoveries to us!

So Why Do Quick-Change Info Boards Work?

The obvious answer to this question is their large size, large, easy to read print, and location - quick-change info boards are often directly in visitor pathways (visitors literally run into them). But I believe there is a more subtle reason for their success: the message and the medium.

The Medium

The Vancouver Aquarium is well known for its aesthetic beauty as well as its dedication to exhibiting animals within their ecological framework. An informal, handwritten message comes as a bit of a surprise to visitors. The novelty of the quick-change info board is a definite attractant for visitors. The look of the quick-change info board conveys the message of "quick, this just happened - read it before it changes!". Quick-change info boards are much like advertising in print or on television. The look of the advertising sends a stronger message than the printed or spoken message.

The Message

The flexibility of quick-change info boards means they can address topics that are inherently more interesting to visitors; quick-change info board messages are immediate to the experience while maintaining the golden rules of label writing (see Serrel, 1983). Most labels and graphics,

by their relatively permanent nature, must convey information that is not likely to change - physical features of an animal, the animal's name (often common and scientific) or basic natural history of the animal. The very essence of quick-change info boards is to provide visitors with current, changing information about animal behaviour, new animals in an exhibit, or animal births. All of the information is about what that animal is doing that day ("something new is happening in this exhibit - look now or you'll miss it"). The quick-change info board moves the visitor from a generic experience about a group or species of animals to a current experience with an individual animal. This specific experience provides the visitors with insight into some of the different things that animals do.

The other significant difference in the messages conveyed in traditional labels versus the quick-change info boards is the level and type of interactions the message attempts to generate between the visitor and the animals. Most of the labels and graphics at the Vancouver Aquarium direct the visitor to look for something specific in the exhibit or about the animal. An example of a label which directs visitors to watch animals is for the cleaner wrasse:

Cleaner Wrasse

As its name suggests this wrasse cleans other fish. Watch and see.

or the graphic beside an Amazonian flooded forest fish exhibit:

Watch a tambaqui as it swims towards you. These fish are flattened from side to side which makes it easy for them to swim between trees.

Because of the dynamic nature of animals, any behavioural message must be very generic (such as a cleaning behaviour) or risk the visitor being disappointed by not seeing the behaviour the label asked the visitor to search for. With a negative experience (not seeing what was explained) the likelihood of visitors investing energy into reading other labels or graphics decreases.

The level of interaction between visitor and animals with a quick-change info board is higher than with traditional labels or graphics. Visitors are more likely to see the animal activity referred to by the quick-change info boards because each board can be written to describe the activities of that animal for that day or even that hour! This positive experience is more likely to interest the visitor and encourage them to look for more animal activity.

Quick-change info boards can be successfully used to combat a common visitor misconception that animals don't do anything unless there is human intervention (feeding, touching, etc.). This misconception is detrimental to our goal to help visitors better understand the changes in animals' daily

lives. Evidence of this visitor misconception comes from the common question "when will the trainers do something with the whales" and the common sight of a visitor tapping on the exhibit glass to make the fish 'do something'. With quick-change info boards, visitors are often seen looking back and forth between the quick-change info board and the animal in the exhibit as they watch for the highlighted activities and begin to make their own discoveries.

Where Do We Go From Here?

This anecdotal evidence has shown us how successful quick-change info boards are at helping our visitor's understand the changing nature of animals and thus reaching our interpretive goals. We are currently undertaking a study to find empirical evidence to support our claims. Regardless of what we find, the quick-change info boards provide our visitors with an experience which truly enhances their Aquarium experience and empowers them to spend more time watching animals.

References

- Bitgood, S. (1988). A comparison of formal and informal learning. Tech. Report No. 88-10. Jacksonville, AL: Center for Social Design.
- Milan, L. and M. Wourms, (1992). A Zoological Park is Not Just Another Museum. *Curator*, 35/2. pp. 120-136
- Serrel, B. (1983). *Making exhibit labels: A step by step guide*. Nashville, TN: American Association for State and Local History.

Figure 1

An example of some of the quick-change information boards used to highlight the changes in the midas cichlid exhibit.

Are three fish esting their bobies?

No. They're keeping their bobies?

Find a family of Mides Cichlids (hint: the babies are 71MV)

Exting babies in their mouth?

Keep Watching-chances are you will see that fish spit the baby back out in a new spot!

Micros Cichlid Bables!

Jou'll have to look corefully to find the babies - they're ting!

The Imonth babies are this big.

The Awar babies are this big.

Can you figure out who the powents are?

What happens when another fish gets close to the babies?