

An Analysis of Wildlife in Children's Stories

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ABSTRACT. Urban people encounter wildlife in various ways. One of the most important is the vicarious encounter with animals in children's stories. The surprising number of children's animal stories can be divided into three categories, each of which affects children's beliefs, attitudes, and preferences for wildlife. Because children's stories may have such a lasting effect, we need to consider the ways in which animals are portrayed in them.

URBAN CHILDREN come into contact with wildlife in a variety of ways. My purpose in this paper is to discuss some of these types of encounters, and the effects on children, with particular emphasis on children's stories.

In a world of concrete and pavement, animals once common have long since disappeared, and have been replaced by pigeons, rats, and squirrels. An occasional raccoon's visit becomes a major event in a suburban neighborhood, and the appearance of a deer provides a topic of family conversation for days.

To a child growing up in such an environment, the opportunity to experience some types of wildlife is severely limited. Yet childhood is the very time when we are subject to the formation of attitudes, preferences, beliefs and values that will govern our behavior for our remaining adult life. Research has indicated that preferences for recreational activities acquired in childhood are major determinants of adult recreational preferences (*Sofrenko and Nolan 1972, Yeosting and Burkhead 1973, Strong 1951*). The main factor in generating these preferences is frequency of participation as a child. I believe a similar process occurs in the formation of preferences for, or aversions to, different species of wildlife. The more frequently a child is exposed to a species, the more familiar he or she will become with it, and the greater his or her preference for it will become.

At first glance, this implies that only pigeons, rats, squirrels, and similar city-dwelling animals will be preferred in the future. Not true. Some people like pigeons; others only tolerate them; and still others vilify them. Certainly no one would consider the rat to be one of the animal kingdom's heroes. At the same time, there is every indication that people value contacts with bears, deer, and other animals that occur infrequently in urban environments. The basic reason for this is that people—and especially children—encounter animals in other ways than by simple direct observation.

TYPES OF LEARNING ENCOUNTERS WITH WILDLIFE

When children learn about a specific animal, the learning will be the result of one of three basic types of encounters with wildlife: direct natural experiences, direct artificial experiences, and vicarious experiences. Direct natural experiences occur when a child encounters an animal directly in its natural habitat. These encounters give the child an opportunity to observe the animal and its behavior in a natural setting. Learning in this kind of encounter comes from simple observation associated with curiosity. This sort of learning

has generally been considered inferior to learning with reward, but is quite potent nonetheless. In fact, in learning about animals commonly found near a child's home, observational learning may well be the most important sort of learning because it occurs with greater frequency than other kinds of learning.

Using the behavior of the animal in its natural habitat as a referent, then the informational accuracy of direct natural experiences is 100 percent. Through these encounters the child learns that a flock of pigeons can be attracted by popcorn, but that a sudden movement will startle them. Or that squirrels are agile in jumping from tree to tree, and that they fear dogs. Or that rabbits will first freeze and then run away if frightened.

But, while this type of learning may be factually accurate, its overall importance is severely limited by the urbanization trends mentioned above. Animals, of course, are not distributed evenly over the landscape, and the probability of having direct natural experiences with many species is quite low. Moreover, though cities do support a variety of animal species, many of these animals are nocturnal and thus are active at a time when most children are unable to observe them.

The second type of encounter with wildlife is the direct artificial experience. In this case, the child can observe the animal directly, but in a situation where the animal is removed from its natural habitat. Examples include zoos, museums, circuses, and nature study programs in schools. Though the informational accuracy of such encounters may be fairly high thanks to many of the interpretive signs found in these institutions, it is substantially less than in direct encounters because the animal's environment is not natural, and because the animal's behavior will have been altered in some way. For example, bears in the wild do not sit up and beg for marshmallows as do bears in zoos; birds do not live in sterile glass cases surrounded by other birds of different species as they are found in museums; and certainly no one would claim that the behavior of circus animals even comes close to that of animals in the wild. Thus, though the informational accuracy of this type of encounter is fairly high, there still may be a fair amount of misinformation in this kind of encounter.

The primary type of learning associated with these encounters is still the observation-

curiosity kind, but in some cases learning with reward is possible. For instance, many zoos and nature centers provide quizboards with perceptual rewards like flashing lights for correct responses. Thus, the child is rewarded for learning about the animal.

Generally, the direct artificial contact with wildlife is the least important of the three. Though a tremendous demand exists for these kinds of facilities, I doubt that the average child spends a great deal of time in them over the course of a year. In addition, these are perceptually rich environments with so large a number of animals competing for a child's attention that the child may not learn a great deal about any specific one.

The third type of encounter with wildlife is the vicarious experience. Here, the child never comes in contact with the animal at all, but learns about it indirectly through some alternative source. Sources of this type of experience include television, newspapers, movies, peers, adults, and, of course, children's literature.

It is with this vicarious type of wildlife contact that the factual content may reach a low ebb. To be sure, there are many factually accurate television shows and movies about animals, but even these reach the child only through an editor who may choose to emphasize such things as the playfulness of immature members of a species, or the like. It is hard not to view the main subject of an animal show as a hero.

It is, however, in children's literature where the greatest misinformation occurs: bears in pants, crows with hats, ducks mowing lawns, squirrels living in houses, etc. A major kind of learning involved in this type of encounter with wildlife is paired-associate learning (Stevenson 1972). In this type of learning, words that appear together frequently become associated. Thus, children come to learn about the *sly* fox, the *big bad* wolf, the *slow* turtle, or the *friendly* bunny. In fact, these adjectives may represent the very foundations of anthropomorphism. It would be interesting to investigate the frequencies with which certain adjectives are associated with different species.

Vicarious contacts with wildlife may well be the child's single most important source of contact. A child who grows up in the city may have limited opportunities for the other types of wildlife experiences, but opportunities for

vicarious contacts are virtually unlimited. Moreover, though much of the children's literature dealing with animals is nonfiction, some research has indicated that children prefer fantasy to fact in their stories. This could certainly be expected to compound the problem of informational accuracy.

ANIMAL CHARACTERS IN CHILDREN'S STORIES

Children's books can be placed in relatively few categories, including adventure, history, sports, biography, what to do when you grow up, etc. And, of course, animal stories.

To estimate the importance of animal themes as a topic, I used the title index of *Children's Books in Print 1972* (Xerox 1972), to make a list of titles that included either "animal", "wildlife", or the name of a particular type of animal. Stories about zoos and farms were also included because they so often are about animals. In some cases, this resulted in the inclusion of books with little or nothing to do with animals. For instance, a story about Sitting Bull, which has to do with Indians, not animals, would be included. On the other hand, this criterion excluded other stories containing wildlife characters because no mention of them was made in the title. It was frustrating to have to pass up such obvious contenders as *Little Red Riding Hood* and *Bambi* because no mention of wildlife occurred in their titles.

In 1972, out of about 40,250 children's books in print, 5,473—13.6 percent—had one or more animals mentioned in the title. I suspect this figure is somewhat low because of the problems with the criterion mentioned above, but I have no empirical justification for this belief. Moreover, while books were not coded into the other categories, I would not be surprised to hear that animal books were the single most frequent type of book in all children's literature.

EFFECTS OF ANIMAL TALES

Children's responses to and preferences for animal themes in literature vary with age and story content. Arbuthnot (1957, 1969) suggests that there are three categories of animal stories: ourselves in fur, animals as animals but talking,

and animals as animals. "Ourselves in fur" is the oldest type of talking-beast folk tale. In these stories, represented by *Aesop's Fables*, *The Wind in the Willows*, and *Peter Rabbit*, the animals talk to one another and are subject to the same follies, foibles, and virtues as humans. These stories are preferred by the youngest children, perhaps because they can recognize characteristics of us adults in the characters. The outraged and outrageous malevolence of an infuriated Donald Duck strikes a chord within all of us. Jan (1969) has condemned this type of tale as being a cornerstone of anthropomorphism.

As children age, however, their tastes change and they come to prefer the more complex tales of animals as animals—but talking. In these stories, represented by Kipling's *Jungle Books* or Hans Christian Anderson's *Ugly Duckling*, the animals lack all human attributes except the powers of thought and speech.

The third type of animal tale—animals as animals—is more realistic because the animals lack all human attributes: they behave only as animals. Examples include such books as Margurite Henry's horse stories and *The Yearling* by Marjorie Rawlings. Arbuthnot believes that in this type of children's fiction animals are portrayed with the greatest objectivity and realism. She is probably correct. Yet it is important to remember that what is objective and realistic to a specialist in children's literature may seem somewhat less so to a biologist. Statistically, the number of children who manage to befriend bobcats or who have the opportunity to nurture a wounded fawn must be quite limited, yet city children may come to believe that this is a standard part of rural life because it happens all the time in books.

Despite the claims for realism and objectivity in the third type of story, I believe that it is these stories that contribute most to popular misconceptions about wildlife. In Freudian terms, these stories are read during the identification and latent stages of development—the stages where children acquire the beliefs and values that will govern their behavior for the remainder of their lives.

Some people have argued that even young children can differentiate between fantasy and reality. When they read the first type of story (ourselves in fur), they know that the rabbit in their yard will not be wearing a jacket like the

rabbit in the book. Similarly, they may be aware that their pets or the animals at the zoo do not talk as do the animals in the second type of story. But, in the third type of story, fact and fantasy become virtually inseparable. True, the animals do not talk or think and they must struggle for survival, but they are just as often given human emotional characteristics such as loneliness, sadness, joy, and so forth. Consider the powerful effect that a story like *The Yearling* must have on a susceptible child. In this story the pet fawn must eventually be shot because it has been eating the garden. What effects might this type of story have on children's attitudes toward deer?

The attitudes, beliefs, and values acquired by children through literature will exert tremendous influence over their adult behavior. The preferences for and aversions to different species obtained in childhood stick with us for a long time. And these preferences may well be the cause of significant problems for wildlife management.

Proverbial among such problems is, of course, the sad case of "the big bad wolf". The image of the wolf in children's media is thought to have been a major factor in its almost complete elimination throughout most of the United States. Fortunately, the wolf now seems to be getting some better press (*Erickson 1970*).

But other management problems persist. The rapid growth of anti-hunting sentiment in the United States (*Klein 1973*) is probably at least partially attributable to such children's stories as *Bambi* and *The Yearling*. Whatever one thinks of hunting, wildlife managers feel that it is one of their most important management tools for controlling wildlife populations. In many areas, deer herds have proliferated to a point where they may do irreparable damage to their habitat. Yet the sentiment against hunting them may be so strong as to force a court decision on the issue.

Yet another important problem in many National Forests and National Parks comes from people-bear interaction. Rangers in Shenandoah National Park (*Wissinger 1974, personal communication*) have told me that much of their time is spent protecting people from bears (or perhaps visa versa). Not only do

children want to see bear cubs, but frequently they will fight one another to get close enough to pet one. These are dangerous tactics if the adult female bear should be nearby.

Why this extreme desire to touch a bear? Bears are one of the most popular subjects in children's books. Consider the image they present. Occasionally they play the villain, as in the Uncle Remus stories; but more often they are portrayed as being slightly dull and rather comic, as in the story of *Goldilocks and the Three Bears*. Movies and television shows often focus on bear cubs enjoying romps through field and forest. Is it any wonder that children love bears?

We could examine other wildlife people problems in the same light, but the key point is that the image of animals created in childhood tends to persist. The content of this image will be dependent on the information the child receives about the animal. With successive generations growing up in large cities, a prime source of such information is children's literature. Just as the women's liberation movement is concerned with how women are portrayed in this literature, so we must be concerned with the image of the natural environment it presents.

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