

Enrichment

In recent years there have been dramatic improvements with regard to the humane care of animals that live in zoos and other captive settings. The modern trend is to provide “enrichment” that may be comprised of training activities or arranging the environment in order to provide increased stimulation for the animals.



Teaching an elephant to lift a foot to receive foot care or teaching a dolphin to swim to a trainer to have its temperature taken are examples of enrichment activities that have health benefits. Arranging a naturalistic enclosure for monkeys that requires that they climb trees to get food that has been strategically placed by caretakers is another example of enrichment.

Robert Mearns Yerkes (1876-1956) was a psychobiologist who founded the first non-human primate research lab in the country. In addition to studying the intellectual testing of humans, Yerkes worked with chimpanzees and apes and as early as the 1920's, he wrote about the importance of enrichment for primates in captivity.

The role that zoologist **Heini Hediger** (1908–1992) played with regard to enrichment has been described as visionary. In the 1950's and for the next several decades, Hediger wrote about zoos and wild animals in captivity describing the responsibility of humans to provide environments for animals that are mentally, physically, and socially healthy.

Hediger was not alone as he conducted his early work in enrichment. Few people realize that B.F. Skinner's work in the 1950's had implications for enrichment. Skinner worked with animals in a research lab and reported that sterile environments result in animals beginning to engage in repetitive, stereotypical behaviors.

By the 1960's, progressive zoos were using devices that facilitated environmental enrichment. In 1960, prolific author, media personality and zoologist/anthropologist **Desmond Morris** (1928-) documented work at the London Zoo in which a device was used to deliver fish to zoo seals.



Since the 1970's, **Hal Markowitz**, Professor of Animal Behavior at San Francisco State University, has made significant contributions in expanding the way we think about enrichment. Markowitz has worked with a variety of animals including Harbor Seals, monkeys, and dolphins. Regarded as one of the single most influential people in the area of enrichment, Markowitz extended the work of earlier operant conditioning researchers. His use of systematic data collection procedures in studies such as teaching animals how to obtain their own food and make choices in their environments advanced the field of enrichment.



Today, zoos around the world provide animals with training for stimulation, behavior management and health care procedures. Animals are provided with problem solving activities in the form of games, using materials, and foraging for food.