

CREATING ICE BLOCK CAKES FOR ENRICHMENT

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Abstract

Animal enrichment has become an essential part of caring for captive animals in a zoological setting. There are various types of enrichment, which include social groupings, exhibit design, sensory stimulation, and different feeding strategies. One of the most common types of enrichment is feeding strategies. Ice blocks filled with various vegetables and fruits can be used to enrich animals. Ice blocks are a very good source of enrichment because: 1) they are low in calories, 2) they keep animals preoccupied for a long time, and 3) the animals can easily manipulate the ice blocks. The ice blocks can be used for many different species of animals such as elephants, rhinos, monkeys and apes, and bears. Care should be used with ice blocks for any animal if there are dental issues.

There are many different kinds ice enrichment from the simple to the elaborate. All you need is a little creativity. Simple ice blocks are just blocks of ice that are made in a large container. These blocks can be left plain or have various food items frozen in them. Adding a chain to the block allows it to be hung in the exhibit.

Ice blocks are made, for the most part, in the same way. Depending on the size of your container, add one to a few inches of water to the container at a time. This allows layers to be created. This also prevents the containers from splitting due the expansion of the water as it freezes. Every couple of layers, various fruits and vegetables are added to the block, placing them around the edges so that the food is visible when the block is removed from the containers. Food items that are placed into the ice blocks come from the target animal's diet. The goal is to present the diet in a new way, not add an additional quantity of food. Once the block has reached the desired size it is removed from the container with warm water.

Ice cakes are a little more time consuming to make. An ice cake can have two simple tiers placed on top of each other or multiple tiers that can be separated by, for instance, bamboo stalks. Each tier is made in different sized containers to allow for different sized tiers. Ice cakes can be designed to include many different decorations. Shapes made out of fruit or vegetables are frozen onto different layers of the cake. Cake molds, ice cube trays in various shapes, and even cookie molds can be used to create the desired shape for the cake decorations. Power tools, like a band saw, can be use to cut out shapes forming numbers or letters. Food coloring can be added to give color. Sugar-free drink mixes can also be used to add flavor as well as give color to the ice. A spray bottle with flavored or colored water can be used to mist the cake giving a "frosting appearance" on the cake. Small decorations can also be frozen on the cake using the spray bottle. Leaves can be placed around the edges of a tier so they can be seen when taken out of the container and make a nice and colorful border around the tier of the cake. Leaves can also be placed on the top and bottom of each layer to make them look like frosting and to add

color. Bamboo culm can be frozen into the layers of the cake to separate each tier and also make good handholds for carrying the cake.

Ice cakes that are used for animal birthdays are a great source of enrichment for the public as well as the animals. The animals get to spend more time working for their food and the people get to enjoy watching the animals have their cake. People look forward to the "Birthday Events" each year. It is their opportunity to be part of the special celebration, while the animal gets to enjoy a special icy treat.