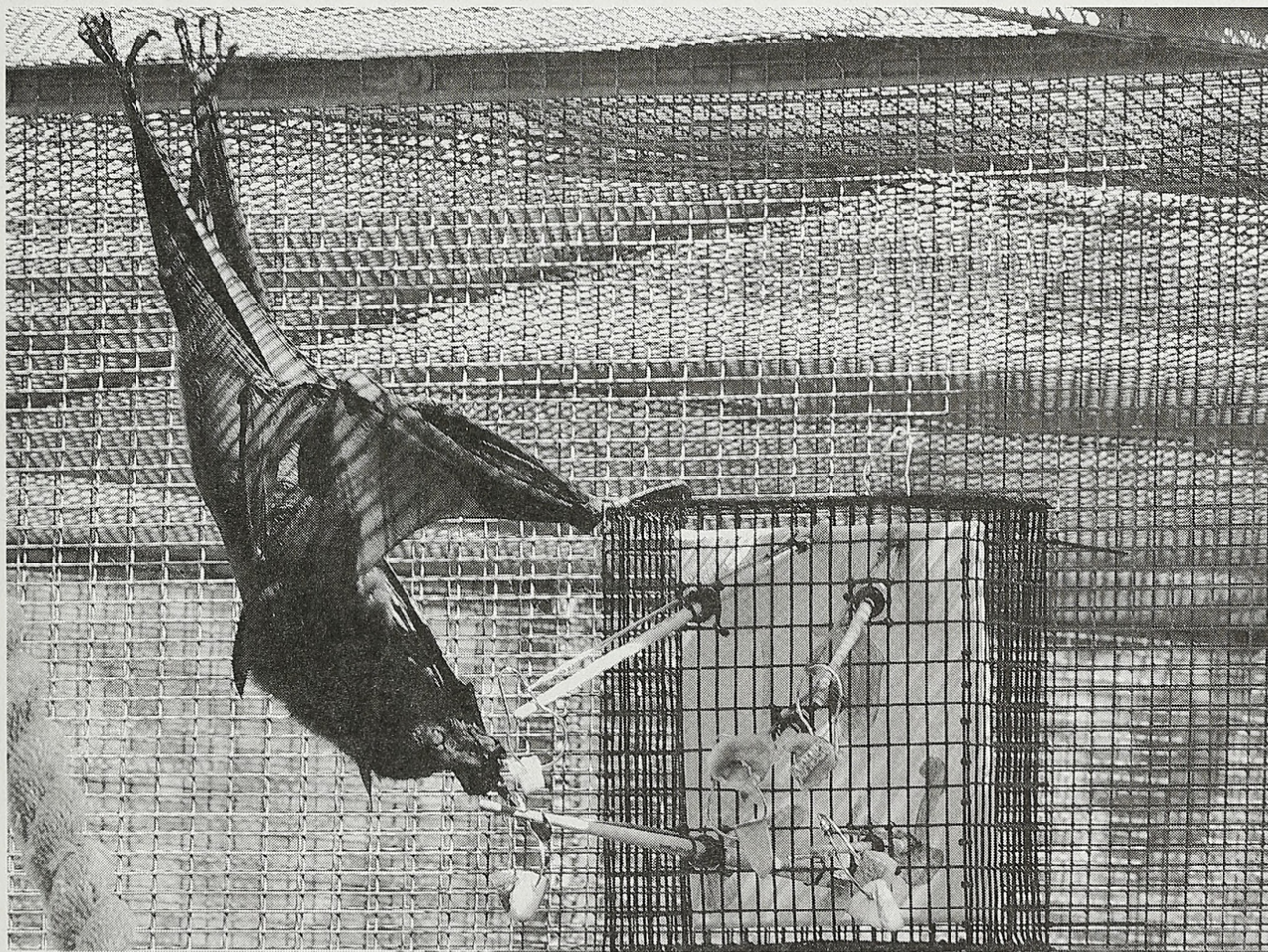


## Flying Fox Artists at Work

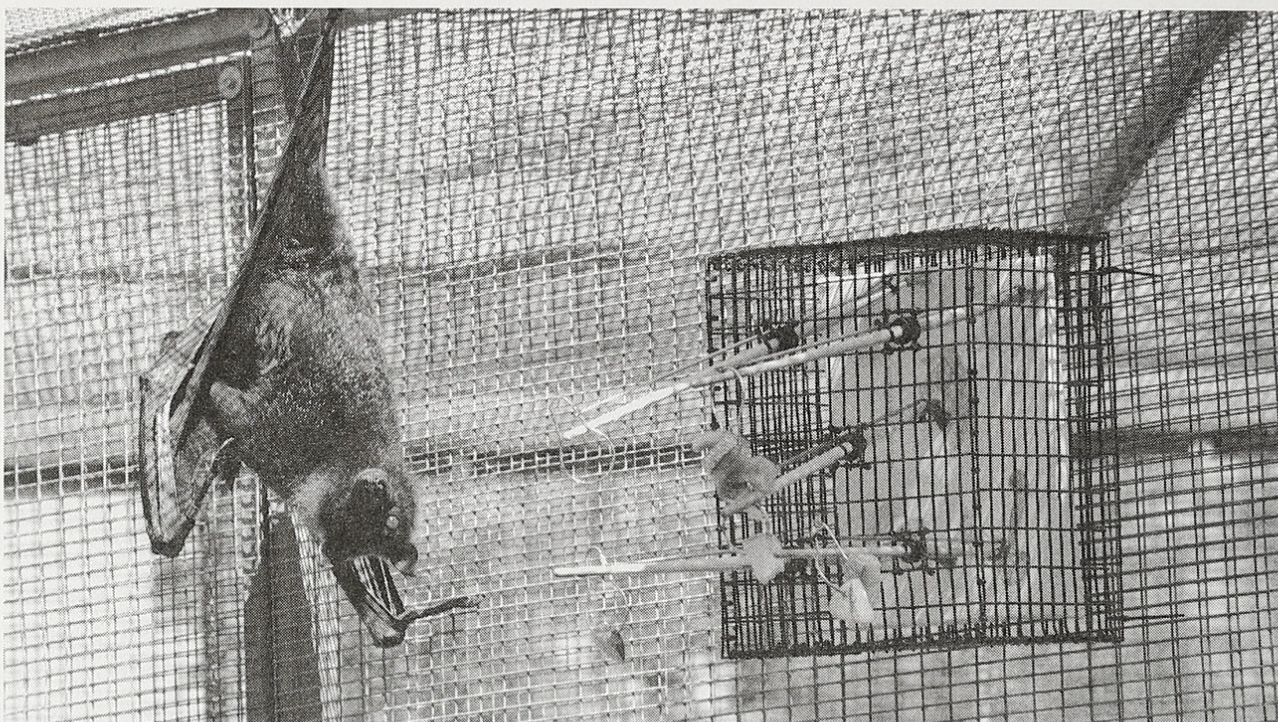
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Seed dispersers, pollinators, artists? For many, these are not the first words that come to mind when people think about fruit bats. These misunderstood animals are often associated with myths and negative connotations; education is one of the key factors utilized by zoo keepers to change these perceptions. In order for the public to show interest and want to save an animal from extinction, they need to be able to relate to that animal on some level. As an educator, that job can be challenging when



A Flying Fox Artist at Work. *Photo by Jenna McMichael*





Creative bats as conservation ambassadors.

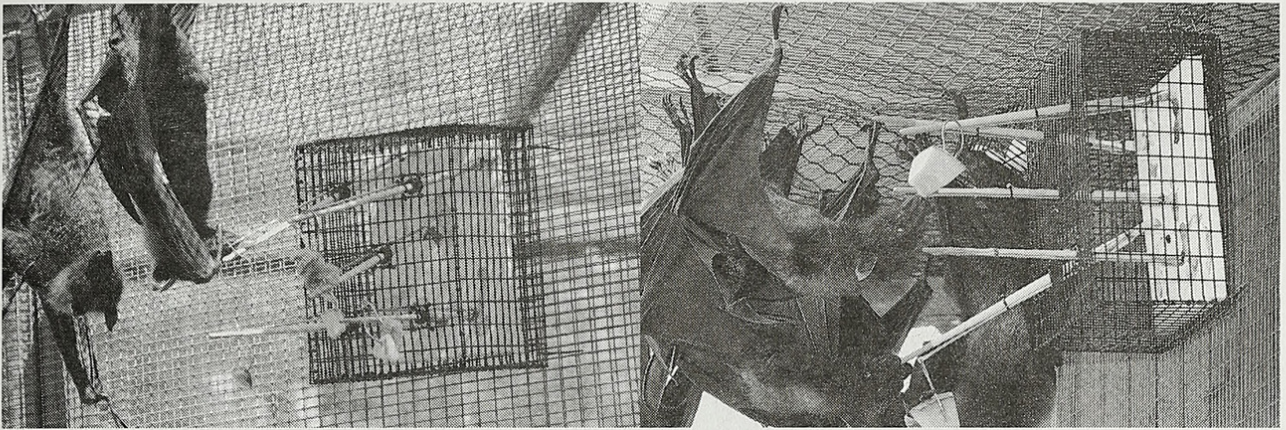
the animal already has a negative reputation. One way to address the often misaligned reputation of bats is to find a way to showcase their creative side - painting!

Designing a way for the bats to paint was a challenge for many reasons. One of the first hurdles was to build an enrichment apparatus that would be light enough to hang from the ceiling and durable enough to hold up to the bats inquisitive nature. The next priority was to perfect this in a way that would make it functional enough that the bats could manipulate it. Fruit bats have an amazing amount of dexterity especially for being limited to the functionality of a thumb. The final challenge was to design the apparatus as naturalistic as possible, meaning the bats would be able to operate the enrichment with ease.

Designing this enrichment involved using materials that the bats were familiar with in hopes of reducing the introduction process. These materials include metal fencing the collection is housed in, zip ties which are used to hold the enrichment together, shower curtain rings, and metal skewers (kabobs). The shower curtain rings and skewers are used on a daily basis to hang food enrichment around the enclosures, the zip ties are used to hang browse. Reusing materials was not only important for the introduction process but for the overall safety of the animals as well. The only materials that were "new" to the bats were the canvas, brushes and paint. Of these materials, the only new objects that could come into direct contact with the animals are the brush handles. The canvas and non-toxic paint are safely enclosed in the vinyl-coated wire housing used to protect the canvas and hang in a way so the bats can access it easily.

The overall functionality of the enrichment was the most grueling challenge of making this apparatus a reality. The goal was to devise this using a limited amount of gadgetry. It needed to be simple enough for a fruit bat to maneuver without being trained on how to do so. The housing for the canvas is the very same material used to house the animals themselves, so there was no doubt it would hold up to scrutiny. The bats do not have direct contact with the paint so half of the brushes are safely enclosed away from the bats. The skewers were attached to the brushes for both a counterweight and a way to attach fruit, which is used to encourage the animals to paint. Shower curtain rings were used to hang the enrichment and attach fruit to the skewers. The finished product functions like this: with a piece of fruit attached to the brushes, a bat approaches the enrichment and uses its thumbs and



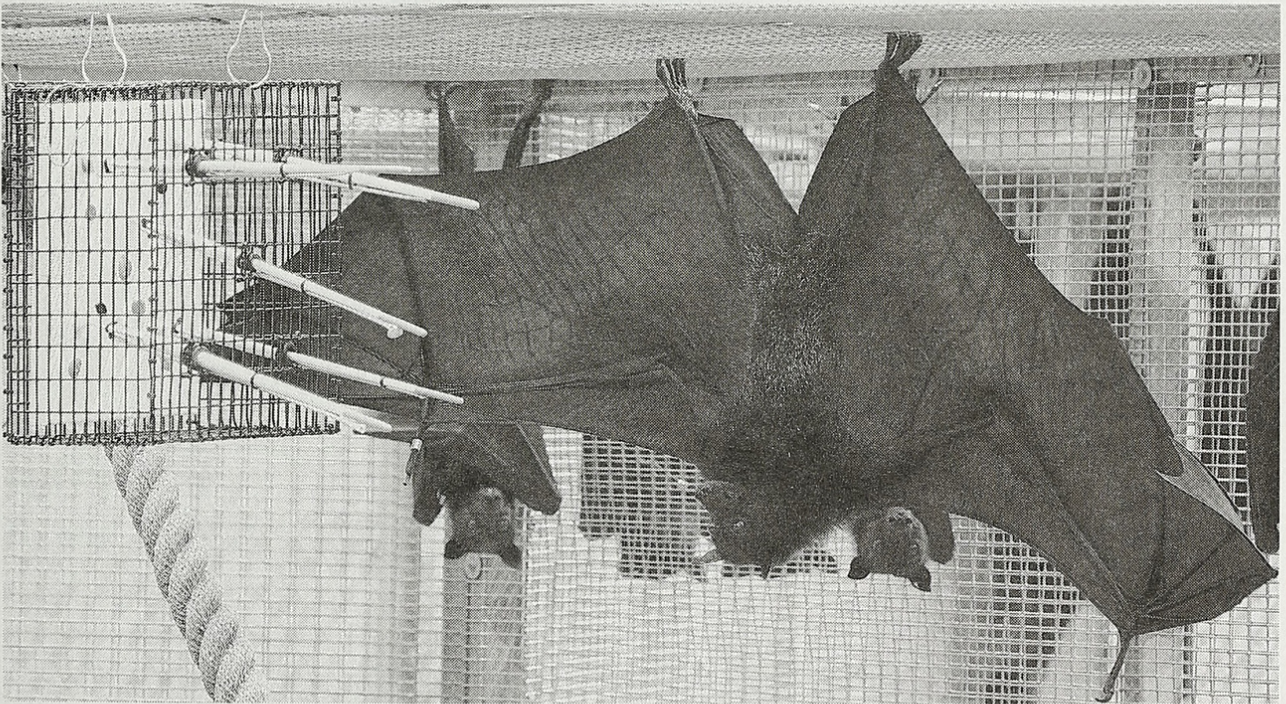


*Photo by Jenna McMichael*

*Photo by Michelle Wilhelmy*

mouth to maneuver the brush so it can eat the fruit. As it's eating the fruit, the paint brush is moving on the canvas, creating a work of art.

The conjecture of using familiar materials to reduce the introduction process was proven right. The painting enrichment was first tested on a group of Large Flying fox (*Pteropus vampyrus*), consisting of eleven female and one male. Upon noticing the enrichment, all twelve bats displayed, a defensive posture in which the bats fully extend both wings, at the enrichment apparatus. The decision was made to first put the enrichment in without food attached to the skewers to see if the novelty alone would prompt the bats to paint. While a few of the bats did approach and investigate the enrichment, they lost interest after a few minutes. The enrichment was removed and cantaloupe was attached to each skewer and placed back in with the animals. The bats again displayed at the enrichment and after a brief period, some began to approach. This time however, the bats began to manipulate the skewers to eat the cantaloupe, creating the first of many bat paintings. The painting enrichment made its debut at the 7th Annual Florida Bat Festival where people could watch the bats paint and purchase a painting to take home, proof that these amazing animals are, without a doubt, something worth saving.



Another masterpiece in the making, these bats collaborate on a canvas.





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