

Conditioning White Rhinos for a Presentation

*By Richard Cody, Keeper
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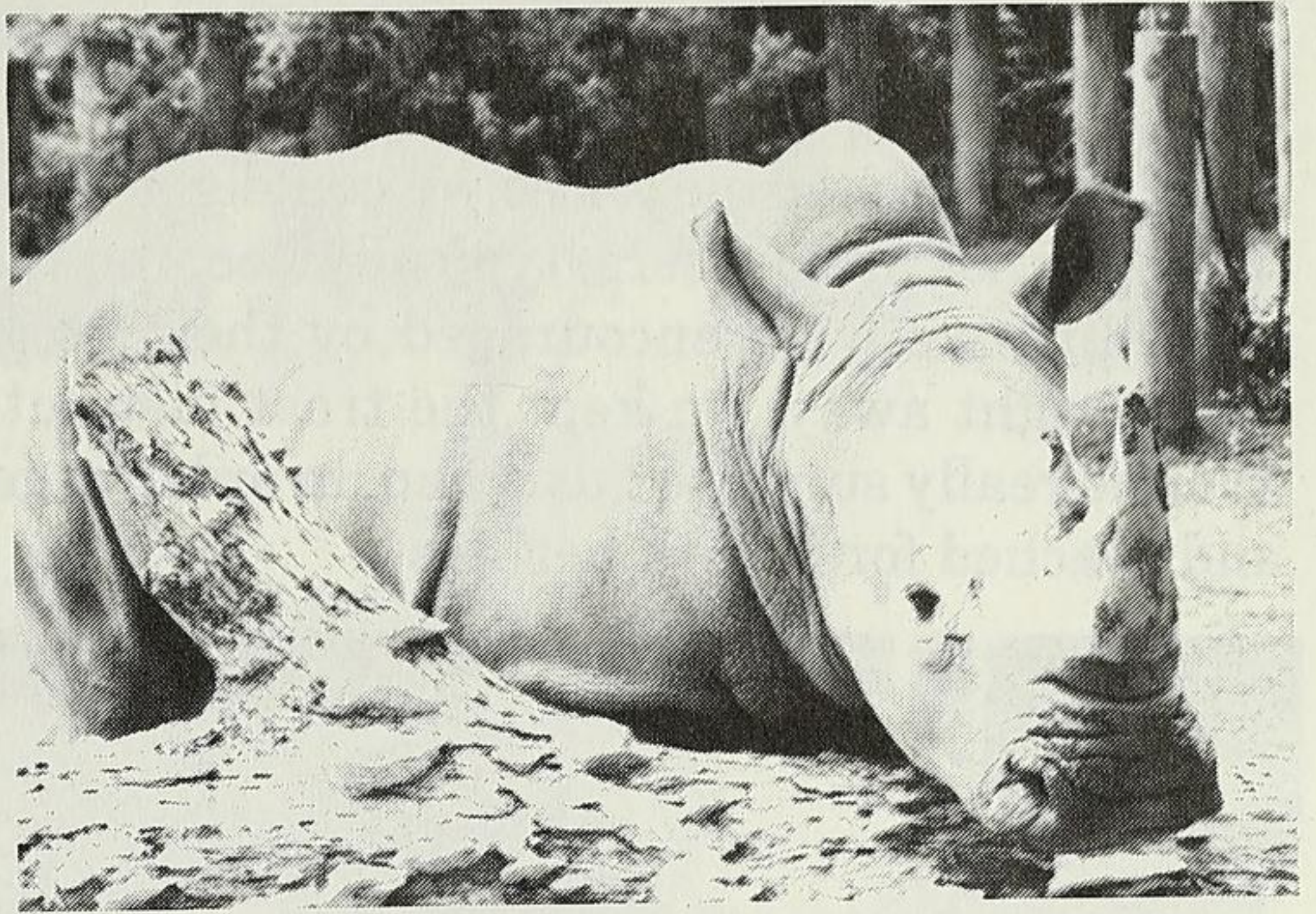
This article is about the work two Audubon Zoo keepers (Linda Weaver and the author) did to condition two white rhinoceroses (*Ceratotherium simum*) to accept food rewards and for purposes of behavioral management.

The animals involved were Saba, a three-year-old male, and Yvonne, a four-year-old female. In April 1994, Yvonne and Saba were eating one 50 lb. bag of grain and about 3/4 of a bale of Bermuda grass each day. They were not given any kind of treat except for an occasional flake of alfalfa hay. The stimulus to which they best responded was having a keeper rub their inner thigh with a hand or brush. After coming from a zoo where the keepers do routine blood work on black rhinos (*Diceros bicornis*), I mentioned to our supervisor that I thought I could condition these white rhinos for similar work. He gave me permission to try it, so I began right away.

I felt fruit, such as bananas and apples, would work best as primary reinforcement during conditioning because, in my previous experience with the black rhinos, the black rhinos were given fruit to hold them steady during their blood work. Only positive reinforcement is used. It was a very slow start trying to get Saba and Yvonne to go near the bananas which I wanted to use as a reward for their behaviors. Each day when I would set up their hay and grain, I put some bananas on top of it hoping they would eat them while eating their usual diet. Over the next couple of weeks they ate the hay around the bananas, eventually pushing the bananas off their diet to get it out of the way. At that point I observed they were at least willing to touch the treat but still not taste it.

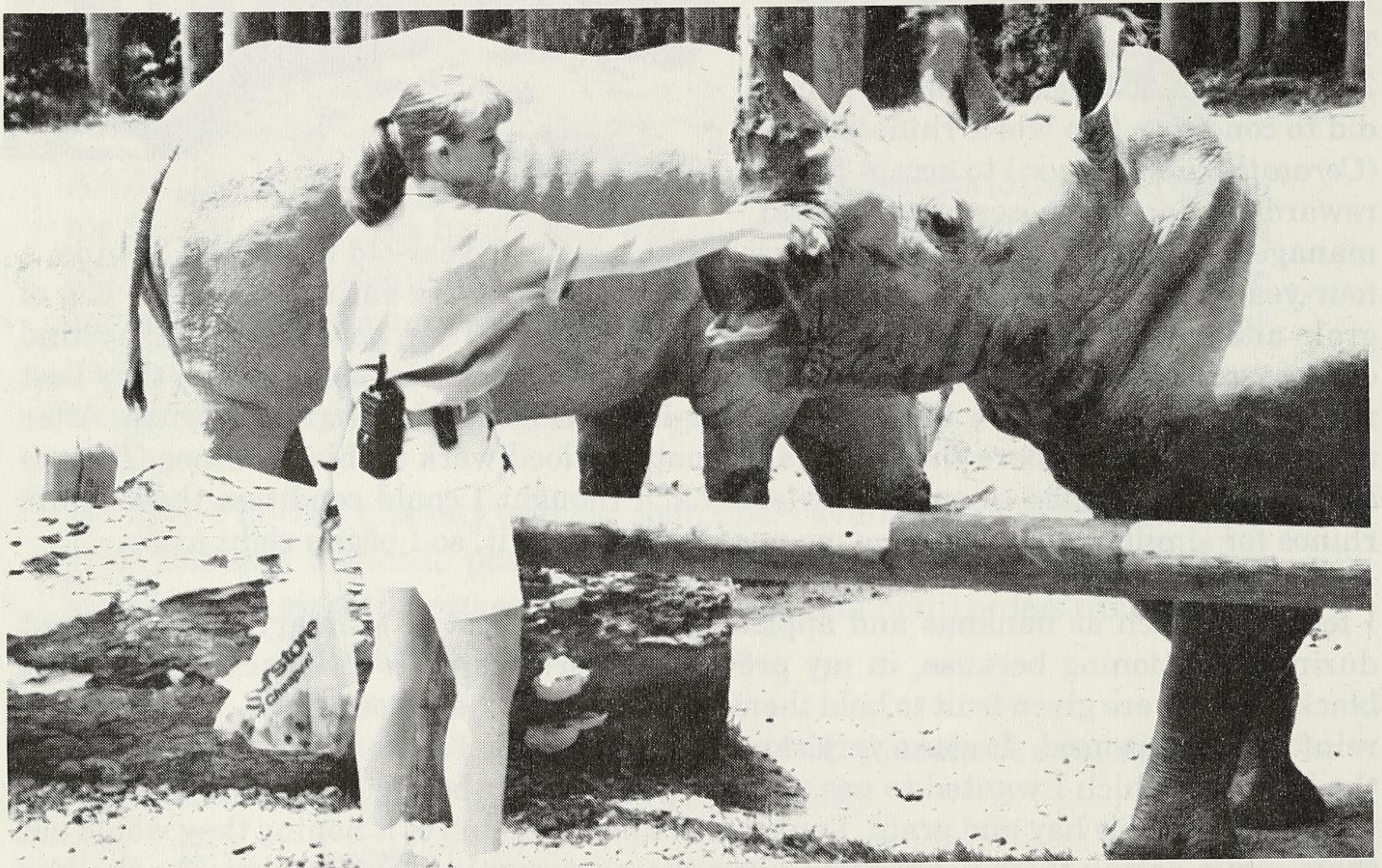
The next step was to bury the treat in the rhinos' diet. I hoped to sneak the treat into their mouths so they could begin to acquire a taste for it. The following mornings during my observations, I found chewed treat covered with saliva on the floor. This went on for a week, until I began to notice that some of the treats were missing. I wanted to make sure that it was indeed Yvonne and Saba who were getting the treat rather than some unwelcome rodent pests. So, I showed each of the rhinos a banana and then set it under their heads. Yvonne cautiously ate hers while Saba backed away. I then cut some apples for Yvonne, and along with the banana, fed half to her and put the other half on the hay. Saba ate from the same piles of hay as Yvonne, so he could eat the treats when he felt more comfortable about it. Soon after, when I was setting the treats on the floor for Yvonne, Saba began competing with Yvonne for keeper attention and would push her away. That never slowed Yvonne, however. Soon after eating treats on the ground, she took one out of my hand. Without giving any sign of being interested before, Saba then began taking treats offered to him.

At this point I began working with Linda so we could use the treats to condition the rhinos for a public presentation (the idea of medical work was dropped for the present



Saba 1.0 white rhino

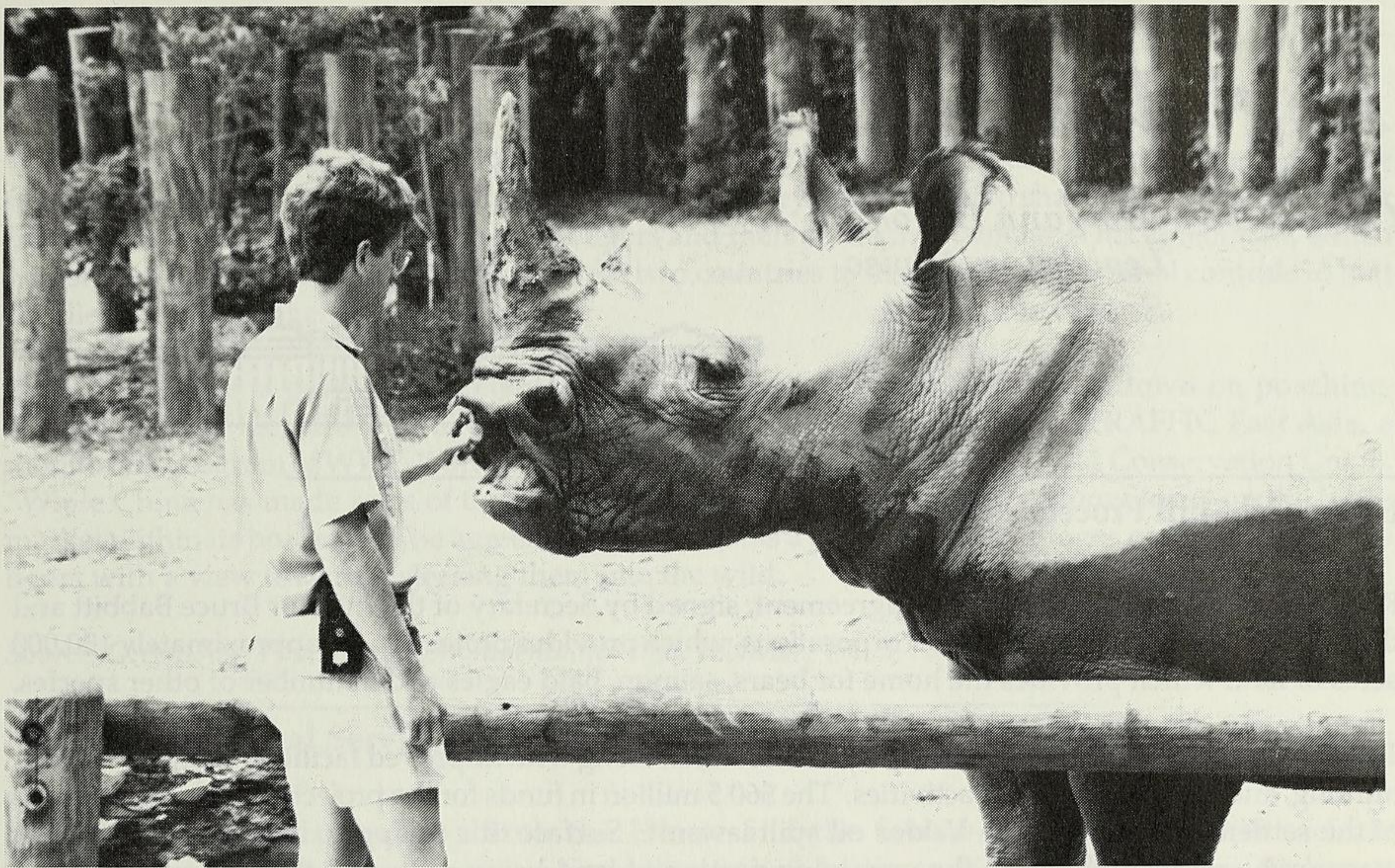
time). Working with them daily for the next two months, we encouraged Yvonne and Saba to raise their heads so we could get a better look at them. Keeping in mind that white rhinos are grazers, typically keeping their heads lower to the ground even while traveling, we were encouraged by their progress. Not wanting them to lower their heads right away, we kept the treat just out of reach for approximately 10 seconds. Yvonne really surprised us when, in order to get the offered treat, she opened her mouth and reached for it with her lips.



During a public presentation, Keeper Linda Weaver works with 0.1 white rhino Yvonne to get her to raise her head, open her mouth and turn her head to the side. *Photo by William J. Cody.*

Linda and I let our supervisor know we were ready for public presentations with the rhinos utilizing a safe area in which the keeper would stand. During these presentations, I usually talked while Linda fed Yvonne and Saba. While feeding them, Linda made them work for the treat by raising their heads, opening their mouths, then wrestling it from her hand with their lips. Linda continued their training during the presentation by tapping the treat on the side of their faces. When the rhinos moved their heads toward the tapping, Linda would give them the treat.

Now when we show the rhinos a closed, palm up hand next to their faces, they respond as if looking for a reward. We used positive reinforcement to up this rapport and behavior with Yvonne and Saba, and we do not allow any reprimanding on the head or face. Occasionally, one of the rhinos will push the other or try to knock one of us down. In these situations, we use the "time out" method and work with the non-aggressive rhino. The learned behaviors came through the use of hand signals or targets. The next area we hope to work on is either ear movement using noise as a cue, or lifting a leg by using a noise as a secondary reinforcer and as a cue. Remembering that Yvonne lifts her leg a little when her thigh is rubbed, we have something to begin working with.



0.1 white rhino Yvonne accepts a reward from author Rich Cody.
(Photo by William J. Cody)



Left to right Rich Cody, 0.1 Yvonne, Linda Weaver and 1.0 Saba during a public demonstration of conditioning the rhinos to accept rewards for desired behaviors. *(Photo by William J. Cody)*