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<NEWS>**On the Training of a Female
Bonobo for Artificial
Insemination in the Columbus
Zoo**

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This is a short report about how to train the female bonobo named Susie for artificial insemination in the Columbus Zoo, OH, USA.

The Columbus Zoo, where the first gorilla was born in captivity, started to try an artificial insemination of bonobos. The object of this project is to increase the gene pool of captive bonobos according to the concept of AZA (the American Zoo and Aquarium Associations) SSPs (Species Survival Plans). The author could be given the chance to watch the training of the female for artificial insemination while staying at the Zoo with permission to study on gorillas, from April to September in 1997.

There were seven bonobos (two full adult males, two full adult females and their infants). One of the adult males had already become the father of infants, but another male could not mate with the females.

No breeding had been seen between this male and the females. So his semen, scraped off the bonobos' hair, including his own was collected in a syringe. One of the females, Susie, who could already bring up her own infants, was decided to be trained to accept a vaginal introduced catheter for artificial insemination.

The trainer was Maureen, one of the keepers of

African Forest Section, who has been engaged in the training of animals. She said that it takes about six months to train bonobos, and it is much easier to train them than gorillas because of their specific character. There is no need for the trainer to make an effort to let them have interest in the training. Bonobos are usually very curious and they always come to see keepers standing in front of the cage. Susie was also one of the very curious bonobos.

There were many small steps till Susie could accept a vaginal introduced catheter. Her small son stayed together when she was trained. She was trained about for fifteen minutes per day. First, Maureen taught Susie to sit in front of her by saying 'Sit down'. Whenever Susie sat in front of her, she got small food as a reward from the trainer. The trainer gave her small food (eg., a piece of apple) as soon as she did what the trainer wanted her to do. Especially when the trainer tried to teach her a new behavior pattern, the food was always given to her as a reward in order to teach her which behavior the trainer wanted. But food was not the most important reward for reinforcement. Susie could not get food every time. The most important reward was to praise her whenever she did the right behavior. The trainer said 'Good girl !', 'Good !', 'Excellent !' etc. very often. Neither negative words nor punishment was used. If Susie did what the trainer did not want, the trainer said just 'No'. Susie could understand the trainer's verbal or visual request very well.

Soon Susie learned to sit in front of the trainer very smoothly. Next step was to learn the names of body parts. For example, when the trainer said 'Show me your ear', Susie had to put her ear close to the fence. Then the trainer watched and touched her ear with saying 'Good girl!'. Susie could learn easily what she should do, and day by day she learned to put the exact body part which the trainer demanded. She learned the names of body parts 'head', 'ear', 'hand', 'foot', 'toe', 'back', 'bottom', 'chest' and etc., and could put each part close to the fence.

When the trainer could touch Susie's each body part freely anytime she wanted, she began to show Susie some goods. On every training time Susie could see a clinical thermometer, a scope of ultrasonography, a hypodermic syringe, and a catheter. When Susie got used to see them, the trainer began to touch her body parts with these goods in stead of her fingers. First the trainer touched Susie's body part just for a moment with each good according to the particular objective. For example the trainer touched her ear with the clinical thermometer everyday. The

touching time was getting longer little by little. When Susie accepted to be touched her ear with the thermometer for more than a few seconds, Maureen began to put the thermometer into her ear hole little by little, and finally the trainer could know Susie's body temperature by putting the thermometer into her ear for a few seconds. The technique to let her accept a vaginal introduced catheter for artificial insemination is the same as the case of the thermometer.

Every day little by little the trainer changed her behavior toward Susie and at last she could let make Susie cooperate with her. As a result from this training, there was no physical or mental stress for Susie from the artificial insemination without anesthesia. She seemed to enjoy this training. She waited for the trainer coming to train her everyday. Even her small son enjoyed the training time and he wanted the trainer to touch him in the same way as his mother. He sometimes spat at the trainer to have attract her interest, but soon he learned to stop it when she said 'no'. He spat water from his mouth on the floor whenever the trainer said 'Spit out', though he kept spitting water at the author who took the VTR near them.

Susie could also comply with the keepers' verbal or visual (a cup) request for a urine sample for the test which provides information about the timing of Susie's cycle and ovulation. In August the male's semen was collected in a syringe and discharged into the catheter to artificially inseminate Susie. Susie could accept the catheter with semen very easily as usual, though we do not have the positive results yet.

This procedure is just in the beginning of practice stage and the keepers are continuing with the training for artificial insemination. Soon the keepers will be able to give bonobos shots and ultrasound diagnosis for a fetus. This training technique called 'target training' is very popular in USA and is also used for gorillas. Only the difference from that of the bonobos is that a 'clinker' is useful for gorillas to concentrate on the target for training. It is sure that such training is very useful for the welfare of captive apes.

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