

# Basics of Otter Training

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Published by:

IUCN/SSC Otter Specialist Group, Otters in Captivity Task Force

<http://www.otterspecialistgroup.org/Library/TaskForces/OCT.html>

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Photo: Target training an Asian small-clawed otter at Indianapolis Zoo

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The Otters in Captivity Task Force extends special thanks to Disney's Animal Kingdom® staff for their review of this document and contribution of extensive training expertise.

## Why we train

A common goal shared by keepers is to provide the best possible care for our otters. The physical well-being of the animals is, perhaps, the most immediate concern of animal caretakers. Training can have an impact on every facet of an animal's health, and can be used in a variety of ways to aid in husbandry and medical care. For example, through training an undernourished otter can be encouraged to eat; an injured otter can be trained to take medication or allow injection; disabled otters can be trained to use their remaining faculties. Healthy otters can benefit from training also. Training otters to stand on a scale allows the keepers to obtain weights reliably without the stress of physical restraint (e.g. netting, grabbing by hand). Otters can be trained to present body parts to the trainer for close inspection. All of these are examples in which the otter participates in its own health care.

Otters are complex animals. Those of you who have worked with otters are probably aware that they are intelligent, curious creatures. They can solve puzzles, use tools, and manipulate their environment. In the wild, otters will use these skills to acquire food and engage in social activities. In captivity, food is provided for them, eliminating the need to work for their meals. How the food is presented to the otters can have an impact on their well-being. A training session during feeding times is one way to allow otters to use those parts of the brain they might use for hunting. Training can be considered activity time, giving otters an opportunity to solve a puzzle and use their memory to achieve training goals. Some otters may respond enthusiastically to training sessions, much like children at playtime. In the absence of pressure to find food or avoid predators, otters may find themselves getting into trouble; in these cases, training can be used to reduce or eliminate undesirable behavior. A consistent training program contributes to the otters' mental health.

Otters have sharp teeth, powerful jaws, and can have aggressive tendencies. Otter and keeper safety, especially with larger species, should always be a priority. Training an otter to voluntarily enter a crate/kennel can eliminate the need to physically restrain or catch with a net, reducing risk of injury for both parties. In some circumstances an otter may be considered too aggressive or dangerous to work with in close contact. Training methods exist that can be used to achieve goals while keepers remain a safe distance from the otter.

Even the daily management of the otters can benefit from training methods. Otters can be shifted from one area to another without force. If two or more otters show aggression toward each other during feedings, they can be trained to separate into different areas. In some cases aggressive otters can be trained to eat cooperatively without separating. In situations where there is not enough space to separate the group, keepers can place visual barriers between animals during feedings. Otters can also be trained to station, that is to go to a specific location such as a log or rock and stay there for feeding.

An added or unexpected bonus of training is its effect on the quality of care given. Training engages keepers in the care of their otters. Keepers who train daily have an investment in their otters that can translate into better care. Success in training creates

positive feedback, or sense of accomplishment, which can motivate keepers to invest more time and energy into the otters in their care.

## **How we train**

### **Motivation**

The foundation of any training program is motivation. Before you begin to train you must understand what motivates your otters. While the most common motivator for training is food, it can take other forms as well. Access to an outdoor exhibit, nest box, or group member can all be motivators, so can a favorite toy or substrate. Training is a two-way process. The trainee offers the behavior and the trainer offers the reinforcement (reward). Keep in mind that each species has a unique set of motivators. Learning the natural history of your species is a good first step toward discovering what will motivate. For example, access to saltwater will likely be less reinforcing to a river otter than to a marine or sea otter. Some species will have preferences for crustaceans or mollusks, while others prefer fish. In addition to natural history, it is equally important to look into your otters' individual history. Two otters within the same family can prefer two different types of fish.

A key element of natural history shared by all species of otter is their high metabolism relative to other mammals (Kruuk et al., 2002). The need to consume a substantial quantity of food relative to their body size makes the diet an excellent motivator. Using their diet to provide reinforcement for a correct behavior provides an opportunity for many behaviors per session versus a single reinforcer such as a toy or access to a favored area. Most fish species can be cut into smaller pieces, allowing for even more rewards per session. Using daily diet items rather than special "treat" foods also makes it easier to maintain healthy weights.

While determining what best motivates your otters, special consideration should be given to the social dynamics of your species as well as to the individuals within the group. At times the desire to be with a family or group member (or to avoid them) can override the desire for food. This fact can make the training of group separations difficult. You may need to work with small approximations, or series of steps, to slowly move individuals farther apart over time.

### **Creativity**

There are a number of books, journal articles, and web sites covering the subject of animal training and for each reference there might be a different way of training. There are many methods that can be successful. Being flexible and creative is important as a trainer. Do not be afraid to try something new or different, even if it does not follow what you have read (including this manual). Knowing your otters will go a long way toward shaping your training plans. In the following example, a keeper overcame a training challenge by looking beyond the designated training time: this particular group of otters was so motivated by food that the beginning of any session was very chaotic. They were so focused on the food they could not focus on the training. The solution was to feed the group a small part of their diet twenty minutes before a session. This had a calming effect on the group and allowed them to focus on the trainers during training time.

## **Positive Reinforcement and Trust**

The concept of positive reinforcement is important in animal training. The basic principle is that a reward is given to the otter for a correct response to a training cue. Over time this can establish a relationship of trust between the trainer and the animal. This trust can be incredibly useful when training behaviors that may normally cause distress. One individual Asian small-clawed otter came to a facility after eleven years in a zoo that did little husbandry training. Her only experience with a crate came from being caught by net and placed in the crate, usually for veterinary procedures. At this new facility, it took several months of training to get this otter to enter a crate willingly. When the time came for her first examination, there was concern that she would, once again, be afraid of the crate. After her exam she was returned to the exhibit and allowed to spend the rest of the day with her mate. During her first training session the following day, when asked to enter the crate, she did so willingly and without hesitation. Her recent and consistent positive reinforcement history was enough to overcome the negative experience of the examination.

## **Timing**

Creating a bond of trust between otter and trainer requires careful timing. This can be one of the more challenging aspects of any kind of training. Otters are known in training circles to be difficult to work with for two reasons: 1) they can move quickly, making it difficult to reinforce at exactly the right moment, and 2) they are very intelligent, which can work against you when training new behaviors. When asked to stand up, your otter may stand, open its mouth, step to the left, hold up its tail, make noise, and put its paw on a rock all in the space of a few seconds! Reinforcement will need to be given at precisely the right time to let the otter know exactly which behavior you want. Accidentally reinforcing inappropriate behavior; such as screaming while feeding or biting at a target, can be very easy to do. Once learned, eliminating the undesirable behavior can be difficult and/or time consuming, especially for a novice trainer. One way to avoid reinforcing these behaviors is to begin with steps that are very short in duration and can be achieved quickly. Doing this gives the otter less time to offer any of the undesired behaviors.

## **Training Plans and Consistency**

Timing of reinforcement goes hand in hand with consistency. This means rewarding at the right time, every time. The right time will be determined by your training plan in a series of steps called 'approximations.' These approximations will provide a map from beginning to end of a new behavior. Having a plan is important, but remember, be flexible. Your otter may not know the plan and will go in a direction that you did not anticipate. A good training plan is one that is adaptable to many situations. Examples of training plans are provided later in this document.

Another recommended technique to maintain consistency is to use one trainer for any new behavior. While going through the steps to produce a new behavior, having the same person with the same timing leading the way can be beneficial. Two or more people with different timing can cause confusion for the otter and tend to slow the process. Ideally sessions occur one or two times a day every day. For some institutions this schedule may not be possible since they have employees or volunteers who work with the otters for only one or two

days a week. In these situations, having two trainers who are able to work more sessions per week is preferable over one trainer working fewer sessions. With multiple trainers, having a clear training plan and good communication between trainers is essential for success.

### **The Bridge**

In addition to a good training plan and a single trainer for each new behavior, another tool commonly used to help with consistency and timing is known as a “bridge.” In some cases delivering the fish reward at the right moment is easy to do. At other times the otter may be several feet away or behind a fence. In these situations a whistle, clicker, or a verbal “good” can be used to tell the otter that it has just done the right thing and a reward is coming. This is called a “bridging stimulus” or “bridge” because it bridges the gap in time between correct behavior and reward. With practice a bridge can become very precise so the otter knows the exact behavior you are looking for the moment it occurs. There are many different types of bridge. The selection of the bridge will depend on trainer preference, what makes sense to the animal you are working with, and the animal’s current situation. A favorite among trainers is the dog whistle, a three to four inch (seven to ten centimeter) metal tube that can emit a range of high frequency tones. It can be held in the mouth keeping hands free for feeding. The whistle can be used to respond quickly and the tone makes for a very clear bridge. A clicker is a small, rectangular box with a metal plate inside. Sound is produced by pressing down on the metal plate and releasing, creating a double click.



Dog whistle



Clicker

### **What we train**

When starting a training program with an otter that has never been trained before, begin with behaviors that lay a good foundation for future training. Most foundation behaviors are simple but immensely useful for building more complex behaviors later. What follows are examples of common otter foundation behaviors. With each there is a description of the foundation behavior, how it is used, and how it is trained. A sample training plan is provided for a few of the more complex behaviors that can be used as a starting point. Training plans act as the roadmap for a given behavior, where each approximation is mapped out from beginning to end. In those instances where the otter moves two steps ahead, the trainer will already know what the next step will be. Training plans also work in reverse. If an otter becomes stuck on a certain step, the trainer can go back to a previous step, reinforce that, and continue forward, or go in an entirely new direction. The training plans may need to be revised for each institution based upon animal management policies. In some cases plans may need to be altered to better suit individuals within the same group. Once again, be flexible.

## **Bridging**

The first behavior that you train should be to recognize the bridge. Otters do not instinctively know that a whistle or a click means food is coming. This is a good behavior for a new trainer to start with as it is a good way to practice timing. Bridging can be done during every feeding and most otters will learn this quickly.

The training plan is quite simple. Blow your whistle (or use your clicker, or say “good” etc.) followed by giving the otter its food. The bridge can be used once per feeding if the entire meal is given at once, but you can progress faster by dividing each meal into smaller portions and bridging before each one. The goal here is to have the otter associate the bridge with a food reward.

## **Focus**

An often overlooked foundation behavior is having the animal focused on the trainer. The otter attention span is notoriously short, which leads to frustration as you wait for your otter to focus on you. What the behavior looks like is the otter sits or stands calmly in front of the trainer with its eyes focused on what the trainer is doing. Having this behavior trained can do wonders for any other training you plan to do.

Like every other facet of training, knowing your otters will be the first step. Giving undivided attention can be difficult for some otters. Begin by learning their behavior patterns and plan accordingly. Trying to train at the same time that they take a nap everyday is not the best way to earn their attention. In some cases otters are shifted from one area to another for training (e.g. from an outside exhibit to indoor holding). This new area may require some scent marking, especially if this area has been cleaned recently. In this situation it can be beneficial to allow the otters a few minutes to sniff around before asking them for attention. Choosing the right time for training will provide your otters with the best opportunity for success.

Training this behavior will look different for each otter that is trained. There are a few behaviors to watch for with all otters. Unless you want your otter to scream throughout your training sessions, be sure to bridge and reward only when it is quiet. This is a good opportunity to get a particularly noisy otter to quiet down a little. If the otter moves around a lot, be sure to bridge and reward only when it is near you. Once the otter is nearby and quiet, watch for it to look in your direction; then bridge and reward. Doing so will establish you as the focus of each feeding/training session. When you are confident the otter understands what you are looking for you can increase the length of time required for calm, focused behavior before giving the reward.

In some cases it can be useful to have a hand cue to help focus the otters' attention. Any cue can be used, such as holding your arm out in front of you with the palm of your hand facing the otter. A cue is not necessary if you have an attentive otter, but is helpful when working with an otter that needs something specific to hold its attention.

## **Target**

One of the single most useful behaviors an animal can learn is to recognize a target. This is our way of asking them to go to a certain place or touch a certain object without having to learn otter language. A target can be used as the foundation for almost any other behavior.

The first step will be to decide what to use as a target. A common target is a thin pole with a ball or pool buoy attached to the end.



Sample target

The length will vary depending on your circumstances but a common starting point is four feet (1.23 m). The materials used should be safe. Otters may try to bite the target in the beginning so it should not break off in their mouths.

The next step will be to show the target to the otter and reward for calm behavior. When you are confident the otter understands that the target is not bad, bring it close enough to be sniffed. The sense of smell is so important to otters it is likely that the first response to the target will be to sniff it. If that happens, reward the otter as its nose comes close to or in contact with the target. Use your bridge to ensure that you are rewarding at the right moment; your otter may only sniff the target for a second. Some species, notably sea otters, may immediately attempt to grab the target with their paws.

While it is unlikely, there is a chance that the otter will show no interest at all in the target. In this case you can take small steps to bring the target close to the otter's paw. Show the target, then bridge and reward. Bring the target a little closer and, as long as the otter doesn't move away, bridge and reward. Continue until you can touch the otter's paw with the target.

From this point it will be up to the trainer how to proceed. Touching the target with the nose or grabbing the target with both paws are common and acceptable forms of targeting. Touching the target with the top of the head or the tail are also useful at times. Train the behavior in the direction you want it to go according to the plan you have put together.

Now that the otter is touching the target with the body part you have chosen, move the target a few inches (cm) away and allow the otter to go to the target. When the otter understands the concept of "go to the target," you can move to different places and have it follow. At this stage you can also train the otter to hold the target in one place for longer periods of time.

### **Sample Training Plan : Target**

**Goal of behavior:** To have otters go to a target object and hold its position at the target until bridged

1. Introduce the target at the side of the mesh door while you feed the otters through the mesh.
2. Approximate the target closer to the otters. Once they are comfortable with the target, place target in front of them and cue "target".
3. Reward the otters for touching the target.
4. Approximate that one paw touches the target.
5. Approximate that both paws touch the target.
6. Work on shaping step 5 so that the otters hold their paws to the target for short periods of time.
7. Lengthen the holding time and then vary it. When bridged, they should release the target.
8. Move target a short distance away and bridge when otter goes to the target.
9. Move target a greater distance away. Have otter go to target and hold until bridged.



Target training and holding an otter's attention in one spot are key tools to facilitate stress reduction during routine and important health-check procedures such as ultra-sounding to test for pregnancy. (Photo: Ultra-sounding a giant otter at Dortmund Zoo)

### **Crate**

When transporting otters from one location to another, a common practice is to place them in a small kennel or crate. Getting untrained otters into a crate can involve baiting (throwing food into the crate and waiting for the otter to go in on its own), leaving the crate in the enclosure to encourage the otter to nest in the crate, or capturing the otter with a net and placing it in by hand. Any of these methods can be effective; however, the first two are unreliable, and the third can be unsafe for both the keepers and the otters. Grabbing an otter by hand is notoriously difficult. Their loose skin and flexible bodies allow them to practically turn in their own skin and bite the grabber. Training the otters to enter the crate can reduce the possibility for injury and stress.

The training plan for crate training will vary depending upon each institution's policies and setup. Some kennels will have side swinging doors while others have guillotine (up and down moving doors) doors. The general training plan provided here should be adaptable for any situation. The first step will be to choose/build your crate. Ideally your crate will be at least as long as the otters. A shorter crate will require an extra training step since the otters will need to turn around in order to get their whole bodies, tail and all, inside.





Example of otter beginning to enter crate

One benefit to working with otters is they are not often easily frightened by new things. Placing the crate in the otters' enclosure will often result in curious exploration inside and out. If the otters have had negative experiences with the crate in the past, it may be best to introduce it slowly. Have the crate visible but outside the enclosure at first. Once the otters are accustomed to the crate, move it closer until you are confident that it can be placed in the enclosure without causing unnecessary stress. The amount of time this takes will vary depending on the otter and will be up to the trainer to judge. In some cases it can take one session, in others several weeks.

When the otters are comfortable with the crate, the trainer can begin using the target to bring them closer. Having the door to the crate open or removed completely in the beginning can give the otters room to move. The trainer will need to be flexible and be aware of the otter's behavior at all times, and that behavior can certainly be unexpected. For instance, during one otter's crate training there came a point where she would not put more than her head into the crate. In an effort to make some progress the trainer closed the door and asked the otter to enter. Having the door closed gave the otter a task which was enough of a distraction to make her seemingly forget that she did not want to enter. Seeing the door closed, she opened it herself and entered immediately. The trainer blew the whistle and gave her a reward. By trying something new an obstacle was overcome and the training progressed quickly from that point.

When you are working with otters in free contact (i.e., working inside the enclosure with the animal) having a long target pole can be helpful. Begin by placing the target outside the front of the crate. As the otter becomes comfortable going to the target it can be moved into the crate in a series of small steps until you have reached the back of the crate. Each small step should be rewarded at this point, preferably giving each reward inside the crate. In some cases a target used in this way can become difficult to work with as you try to get the otter and the target to fit in the back of the crate. If your crate has holes in the sides, one trick that can help is to hold the target against the holes on the outside and have the otter touch the target from

inside the crate. Another solution can be to create a small target that can fit through the holes. This will allow you to place the target in the back of the crate without going through the front. One advantage of this method is it can be safer since you are not reaching over the otter while targeting.

A complete behavior will often fade the use of a target and introduce a cue. This is accomplished by giving the verbal cue such as “crate” or any hand cue you choose right before you show the target. Once the target and cue are associated together you can remove the target by giving only the cue and waiting for the otter to respond. If the otter responds immediately, you are ready to move on. If the otter hesitates, you can show the target after giving the cue and slowly fade its use until only the cue is needed. If you choose to eliminate the target this is a good place within the plan to do so.

The last step in the process can also be the most challenging. Closing the door can cause some otters to panic and should be done very carefully. Begin by touching the door with your hand while the otter is sitting calmly in the crate. If you work in protected contact (i.e., keepers do not enter the animal’s enclosure) the door may have a string or lever that is pulled to close it. If that is the case you can hold the string/lever and apply slight pressure as the otter sits calmly in the crate. Close the door a little at a time and be sure to reward the otter only while it is in the crate. Some otters may try to force open the door as you start to close it. If this happens open the door and start over. This is the stage in the training where you want the otter to trust you. Trying to trick the otter into letting the door close, or shutting it too fast and leaving it closed can cause setbacks for the training process. For the first few times that you close the crate completely, open it again immediately, before the otter has a chance to react. Doing this can show your otter that you can be trusted to open the door at all times. At this point you should be able to increase the amount of time the door is closed with a calm otter sitting in your crate.

Since most crating will involve moving the otter, it can be beneficial to include that in your training plan. As the otter sits calmly in its crate stand next to it and put your hand on the handle. Proceed in small steps to raise the crate off the ground and carry it a short distance, rewarding the otter in the crate during each step.

### **Sample Training Plan : Crate**

**Goal of Behavior:** To have otter sit calmly in crate with door closed and allow transport to other areas

1. Allow the crate to sit in the holding stall until otters appear comfortable with it there.
2. Use the target behavior to approximate the otters towards the holding crate. Reward as the otter comes closer to the crate.
3. Cue with verbal "crate" or hand cue, place target inside crate and reward otter for going into crate.
4. Fade use of target and use only “crate” cue.

5. Work on closing the door behind the otter.
6. Once the otter is calm, keep door closed for longer periods of time.
7. Pick up crate and carry for increasingly long periods of time

The end of this guide marks the beginning of your training program. From here the possibilities are endless. The instructions included within are only guidelines for you to adapt to your unique situation. Every exhibit, trainer, and otter is different. Using these training plans will get you started, but you may find you quickly outgrow the limited offerings herein. You are encouraged to create your own training plans for the behaviors that best suit your otters' needs and environment.

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