

http://www.dogscouts.org/Dog_Activ-_Scent_Discrim.html

This is an old article from Dog Scouts of America – doesn't appear on their website anymore.

Scent Discrimination: "What's that smell?"

Scent Discrimination

At Dog Scouts Camp, we periodically learn skills which involve the dog's ability to distinguish scents. Search and Rescue, Scent Hurdle Racing, Tacking, Scent Discrimination and Drug Detection are a few of the activities which have been featured that include "nose work".

A dog's sense of smell is more powerful than we can possibly imagine. They can easily detect the presence of one drop of blood in a 55 gallon drum of water. Tests performed back in the 1950's by Neuhaus, it was concluded that dogs "Having an olfactory acuity which is from 1,000,000 to 100,000,000 times that of man, a dog can detect one mg of butyric acid in 100,000,000 cubic metres of air, the "volume", said Neuhaus, of a whole town". (Olfaction and Odours by William McCartney).

I'm not so sure how they measure all of this stuff but I'll concur that dogs have one heavy-duty sniffer! Scent work is easy for the dog. The hard part is communicating to the dog which scent it is we want them to discover. And then, once we are able to show them which scent we want them to find, how do we MAKE them want to find it? In the "dark ages" of dog training, there were all kinds of people employing force methods to try to make dogs reliable at scenting. I maintain that the FASTEST and most reliable method to teach a dog to do scent work is with the operant conditioning (click and feed).

Here are several "games" to teach your dog to use his nose to find the things that YOU want him to find.

The Find It Game

A good exercise to get your dog used to using his nose is the "find it" games. Take a cookie and show it to your dog. Let your dog watch you as you go around looking for a place to hide it. Pretend to tuck the cookie away several places before you surreptitiously leave it in one of the places (between the couch cushions, under a pillow, or behind some furniture). Then, let the dog begin looking for it, with the words "Find it!" When he finds it, make a big fuss over him as he eats the cookie.

When he gets used to this game, you can switch to hiding the goodie in a film canister with holes drilled in it. The smell of the cookie will be able to waft through the holes, and the dog will not be able to help himself to the cookie when he finds it. He has to have you there to open it for him and feed him the cookie. Then, start hiding the canister while the dog is in another room, so that he can't see you, and doesn't have any "hints" as to where to look. He will walk around "checking" all of the favourite hiding spots with his nose until he finds it.

The Scent Articles Game

This exercise is used to teach your dog to discriminate one scent from another, as in Utility obedience scent discrimination. You will need five or more identical articles. I use metal to start off with. You could use spoons, empty V8 cans, or regulation scent articles. I started out using metal

bobbers—the kind that are used on fishing nets on the great lakes. They break loose and bob their way to the beach and I've collected them over the years. They look like six inch long, inch and a quarter in diameter sausages with ridges. You will want to number the articles, or otherwise identify them, so that YOU will not get confused as to which one is the correct one.

To begin with, get some treats and a clicker and one of your articles. Choose one article and note the number. Toss the article and get the dog to fetch it and bring it back. When he brings it to you, click and feed him. Touch the article with the same hand you are using to touch and break up the treats. The article should smell like your hands, which smell just like hot dogs, or whatever you are using as a treat. Start throwing the article where the dog has to look for it a little (with his nose), like under the couch, behind the trash can or whatever. Keep tossing the article to different location and reward his "selection" if the right article when he delivers it to you. When the game starts to get so easy it's boring, take a "clean" article and it out in the middle of the floor. Then, toss the scented article, as usual, and have it land about 5 feet away from the unscented article. When the dog makes the correct selection (he may not even see the other article), and delivers it to you, click and feed, as usual. Do NOT click as the dog hovers over the correct article. You don't want to "help" him by doing all of the thinking for him. You want to reward him by making a selection and committing to the correct article.

When you add an unscented article, it's kind of fun to "keep score", noting each correct response or incorrect response. I just note a little "C" or an "I" on a piece of paper, and whether the "test" was one article, two three or four. If the dog chances to pick up the wrong article by mistake, you do not utter one word. You do not tell him he's "wrong". When he tries to deliver it to you, simply don't take it from him, and you don't click and feed him. And he gets one "I" on his report card. You will note how quickly he learns to make the correct choice, and how the "C's" become more prevalent, and the "I's" become non-existent. If he presents you with the wrong article, and you ignore him (don't even look at him), and he goes and picks up the correct article, smile and when he present it to you, click and feed. But that entire response still gets recorded as one "I".

Toss the scented article within 5 feet of the unscented one at least 5 times. If he gets one incorrect, then start again, until he can do it five times in a row correctly. When the exercise seems so simple it's boring, toss the scented article to land within 4 feet of the unscented one. Follow the same procedure as you did before. If the dog should pick up the incorrect article, you might want to replace it with a new "clean" article, because he might go for it again, because it has his mouth (complete with hot dog) scent on it. When he gets five correct responses in a row at 4 feet from the clean article, start tossing it to within 3 feet of the clean article. As you do this, toss it to all different sides of the clean article, north, south, east and west. Chances are, you'll have some bad throws and accidentally have the scented article land closer than expected to the clean one. That's ok. Just try to be more accurate with your toss next time. You don't have to toss it far. You can do this entire exercise in your living room, sitting in a chair and lobbing the articles a mere 5 feet or so in front of you.

When you get to success at throwing the scented article to within 2 feet of the unscented one, it's time to add a second unscented article. Before you do this, though, make sure your dog has reached the point of noticing the one "clean" article and rejecting it. He should have had this opportunity at least several times. If he hasn't, then keep moving closer with your scented and unscented article, until he has to choose. When he has made five of these correct choices in a row, then it's safe to add a second unscented article. Continue as before, tossing the scented article within one or two feet from the clean one, and if the dog makes a mistake, let him figure it out. Ignore him, and refuse to take the incorrect article from him. By now, he should be on the program, and say to himself, "something is wrong with this picture." He should then realise that to get the payoff, he must go

back to the articles and find the correct one. Any time he gets the incorrect article just let him choose again, until he finds the correct one, and reinforce him. Even if he brings back every article but the correct one, be patient, and wait for him to bring you the correct article and reward him.

Again, when he is getting five correct responses in a row, up the ante by adding another clean article. Continue as before and add another. Pretty soon, you'll be working with an entire set. Next, begin turning your dog around, so that he does not see where you place the article in the set. This will tell you for sure whether he's using his nose to look for it, or just relying on visual and auditory cues to "mark" where it lands. If you have a regulation set of articles, consisting of wood, leather and metal, then you can continue to add the wood and leather, while you are working on the first metal one.

Now, you may think that you've successfully taught your dog to do scent articles. No, you've only taught him to find a correct "metal" article among other articles. Now, you have to go back to square one and begin teaching him to detect the correct wood and leather articles among the others. Metal was the easiest, because it doesn't harbour the scent of other things as long (it's less porous), and it doesn't carry as much of its own scent.

Just last week, I taught my young dog the metal scent article. Within 45 minutes, she was correctly picking out the scented article from a group of 16 – five metal, five leather and five wood (plus the one scented metal article). This method is easy, fast and effective. You don't need special equipment, like tie-down boards (which I feel only teach the dog to "test" for the loose article, instead of using his nose.) there is no admonishment or "hint" given at the wrong or right choice (which I feel teaches the dog that YOU'LL tell him when he gets close to right article and he doesn't have to learn to do it himself.) With this method, the dog learns to discriminate with his nose (which is EASY for him), which article will earn him the reinforcement (the one with your scent on it). If you feel that 45 minutes straight is a long time to "press" a dog to learn a new behaviour (I did), perform a little test. Don't put the scented article out there, and just sit back in your chair, like you're saying, "that's all –I'm done," and see what your dog does. If he runs back to the pile of articles to continue the game, he's not ready to quit yet. That's the beauty of clicker training. It's not hard on the animal – it's all fun. If your' doing it right, he won't want to stop.

Your dog does not have to be destined for the Utility obedience ring to learn this exercise. The youngest dog I have ever taught successfully to do the scent discriminated was a 13 week old puppy. Since it's nothing but a game, you don't have to wait for your dog to reach some magical age of physical maturity. If he's got a brain, a nose and a stomach, he can quickly learn the Scent Discrimination Game.