

Do the Dew(claws)?

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As a veterinary sports medicine specialist, I work extensively with canine athletes, developing rehabilitation programs for injured dogs or dogs that required surgery due to performance-related injuries. I have seen many dogs, especially field trial/hunt test and agility dogs, that have chronic carpal arthritis, frequently so severe that they must be retired or at least carefully managed for the rest of their careers. I noticed that very few of those dogs had dewclaws and began to wonder whether these appendages might, in fact, protect a dog from injuries. What I learned might surprise you.

The Anatomy of Dewclaws

Miller's Guide to the Anatomy of the Dog, a veterinary anatomy text, has an excellent figure depicting the muscular anatomy of the distal forelimb. There are 2 functional muscles, the extensor pollicis longus et indicis proprius and flexor digitorum profundus, which are attached to the front dewclaw by 4 tendons (references in blog). Each of those muscle/tendon units has a different function in movement. That means that if you cut off the dew claws, you are preventing the muscles that were attached to the dewclaws from functioning.

In contrast, rear limb dewclaws do not have muscle/tendon attachments, so their removal might be appropriate, except in the breeds such as Briards and Beauceron in which they should be retained.

Dewclaws Do Have Functions

If there are muscles and tendons attached to the dewclaws, then they most likely have a function. Broadly speaking, dewclaws have at least two different functions:

1. Grasp the ground when the dog is turning to prevent torque on the forelimb. Each time the front foot lands on the ground, particularly when the dog is cantering or galloping (see Figure 2), the dewclaw is in touch with the ground. If the dog then needs to turn, the dewclaw actively digs into the ground to stabilize the lower leg and prevent torque. In Figure 3 you can clearly see the dewclaw of a Corgi herding a sheep extended, ready to grip the ground. And in the image at the top of this article, you can see the dewclaws of a dog extended, ready to grip the water!

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If a dog doesn't have dewclaws, the leg will twist on its axis, creating increased pressure on the carpal bones, as well as the elbow, shoulder and toes. A lifetime of this kind of torque and the result can be carpal arthritis or injuries to and subsequent arthritis in other joints of the forelimb, such as the elbow, shoulder, and toes. Remember, the dog is participating in the activity regardless, so there will be concussive pressures on the leg, and if the dewclaw does not help to stabilize the leg, those pressures will be transmitted to other areas of the leg, especially the joints.

2. *Grip objects*. We have all seen dogs using their dewclaws to grip an object such as a ball or bone (Figure 4). I've even seen many photos of agility dogs gripping the teeter for stability (Figure 5). But did you know that the dewclaws' gripping ability can, in fact, save your dog's life? Check out the video "Dewclaws Do Have a Purpose" for "gripping" views of dogs attempting to get out of water onto ice without the help of those ice picks on the inside of their legs. The video also shows dogs using their dewclaws to grip the ice and escape from a potentially fatal situation. I have known several dogs that drowned after falling through ice in the winter. None of them had dewclaws. If they had, perhaps they would have survived and spared their owners the incredible heartache of watching their dogs die unnecessarily.

Arguments for Removing Dewclaws

1. The dewclaws will get injured. This is the most common reason I hear for removing dewclaws. A friend of mine had such a severe dewclaw injury in one of her dogs that she swore she would remove them on all the dogs she bred subsequently.

But the data indicate that dewclaws are not injured very often. A study published in 2018 showed that the dewclaw was the LEAST likely toe to be injured in agility dogs, in which landing and turning from jumps and other obstacles put the toes at risk for injuries. Thus, it makes no sense to remove the dewclaws because of risk of injury. And, of course, no one would consider removing the 5th digits in the front feet, which are by far the most commonly injured toe.

- 2. Owners forget to trim the dewclaws. Surely this is a matter of education. Do we really want to remove a functioning digit in all dogs, just because some owners need to be reminded that they must remember to trim the dewclaws?
- 3. Dewclaws make the forelimb look less straight when viewed from the front in conformation. The AKC states: "The breed standard describes the characteristics of the ideal dog to perform the function for which it was bred." While we could have long discussions about the veracity of this statement, it is interesting to note that there are VERY few breed standards that require dewclaw removal. I know of only one the Vizsla breed standard.

A Plea

So, here's a plea to retain dogs' dewclaws. They are a functioning digit. They are the toe least likely to be injured. Isn't this enough to convince us not to do the dewclaws?

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