



GENERAL GUIDE TO DIGIT IDENTITY IN MAINE COON POLYDACTYLS

NOTE: THIS IS A GENERAL GUIDE TO ASSIST IN IDENTIFICATION OF DIGITS ON AN MC POLY. IT DOES NOT DISCUSS SOME OF THE MANY FINER POINTS AND EXCEPTIONS FOUND IN VARIOUS CONFIGURATIONS. FOR ADDITIONAL INSIGHT INTO VARIOUS POLYDACTYL EXPRESSIONS PLEASE CLICK ON THE LINK AT THE END OF THIS DOCUMENT FOR PHOTOS OF OTHER EXAMPLES.

Digits:

Most people talk about "toes" on a cats feet. We prefer to use the word "digits" which will include all that stick out from the cat's paw. And these digits can be specified into the following:

1. Toe

-Like the four last fingers on our hands. These digits point forward and are parallel. A toe touches the ground (carries body weight).

2. Dewclaw

-This is an underdeveloped 'digit' that doesn't touch the ground. On a non poly cat you can find this claw on the inside of the paw. But with a poly foot you can also have an extra dewclaw between 2 other digits or the dewclaw can even be absent. When between two digits it will look like if it supports body weight/touches the ground, but it doesn't.

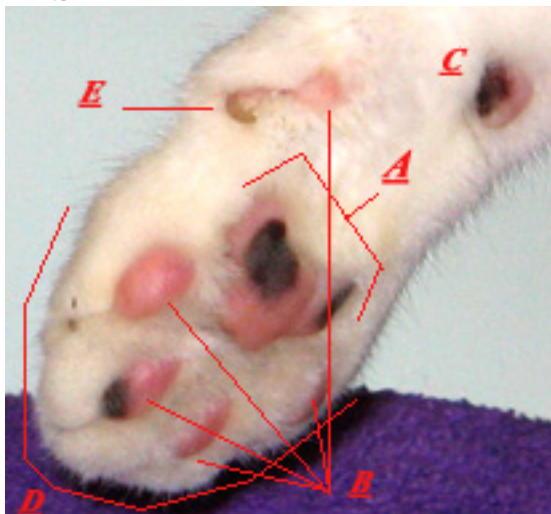
3. Thumb

-This digit is comparable to our own thumb. On the front paws it is opposable, placed (grows from) higher on the paw and sticks out at a different angle. Rear thumbs, although less common, are different in that they are not opposable and appear to be parallel with normal toes. Thumbs touch the ground when the cat stands on 4 paws. With the polys you can see different length (mostly 2 boned or occasionally 3 boned) and types in the thumb, which sometimes makes it hard to determine an additional toe from a thumb. But then determining the pads on the back of the paws will help. More on that later ;-).

4. Nub (or Nubbins)

-This is a very underdeveloped digit, which easily can be overlooked. It doesn't have the developed claw of a dewclaw and sometimes has not broken the skin. We don't see this type of digit that often though.

- Ø All digits, except the nub, have a nail.
- Ø A non poly cat will only have digit types 1 & 2. A non poly cat has on front 5 digits (1dewclaw, 4 toes) and on the back 4 digits (4 toes).
- Ø A poly cat can have all types of digits. The paws of a poly don't have to be symmetrical! A poly can have additional digits, but can also have 5 digits where the standard dewclaw has been changed into a thumb or toe.
- Ø



A = PLANTAR PAD
B=TERMINAL PAD (FINGERTIP).
C = PISIFORM (WRIST) PAD

β STANDARD PAW

POLYDACTYL PAW à



D = TOES
E = DEWCLAW

F=THUMB
G=MOUSE PAD

Pads:

A cat's foot also has pads, which you find on the back of the paw.

On a standard paw we see:

- Ø The pad at the end of each digit is called a terminal / digital pad (comparable with our "fingertip"). The only digit that can have no pad is a "nub".
- Ø Then there's a large pad opposite the 4 standard toes, which consists 3 pads attached/slightly fused together. This is called the standard "plantar/palmar pad".
- Ø Then there's a small pad much higher on the paw which is called a wrist pad (or Pisiform Pad). This pad will be of no importance to you or us, so you can forget it;-).

On a poly paw we will see additional pads.

For example:

- Ø When a cat has 'extra' toes, each toe will have an additional " plantar/palmer pad". This pad will be attached to the standard " plantar/palmar pad". And any other extra toe will have its plantar/palmer pad attached to the previous one. So it will look like a 'necklace string' of pads. In other words the original standard plantar/palmar pad will be broadened.
- Ø A pad comparable to the mouse part of our hand is a mouse pad. This is associated with the "thumb" on a paw. This is a separate pad not attached to plantar/palmar pads. This pad is further up on the foot than the standard " plantar/palmar pad".
- Ø All digits (except sometimes the nub) have a terminal pad (fingertip).
- Ø Only toes and thumbs have an extra pad. The plantar/palmar pad for a toe and a mouse pad for a thumb.
- Ø The plantar pad of an 'extra' toe will be attached/slightly fused with a planter pad of another toe/to the standard planter pad.
- Ø A dewclaw only has a terminal pad (fingertip).
- Ø Only toes and thumbs touch the ground and will carry some body weight. When kittens are still very young their digits will all touch the ground, in fact the paw is totally flat on the ground. This because the muscles of a young kitten are not so strong yet. A cat is a toe walker and as the kitten ages it will put less weight on the whole paw until only toes/thumbs will be the only digits touching the ground.

To start

Note: Making the fur on the back of the cat's paw wet will make it easier to determine the digits and to find hidden pads.

The front paws: Describe the digits from the **inside** to the outside of the paw.

1. Count the total digits on a paw (count the terminal pads (fingertips) / the nails to determine this, watch for nubs that don't have a nail and don't need a terminal pad.
2. Now start with the innermost digit.
 - A.) Is it a nub?
 - B.) If not, do you see an extra pad associated with this digit? Or has it only the terminal pad (fingertip)? If it has only the terminal pad, it's a dewclaw.
 - C.) If you see another pad, is this pad attached to the standard plantar/palmar pad or to an extra plantar/palmar pad of a previous digit (which could be attached to the standard plantar/palmar pad)? Or is this pad far away from the standard plantar/palmar pad?
 - D.) If this pad is attached to a (or the standard) plantar/palmar pad the digit is likely a toe (and the pad a plantar/palmer pad;-)). The digit should be parallel with the last 4 digits when the cat is standing on all 4 paws.
 - E.) If the extra pad is not near the standard plantar/palmer pad it's likely a mouse pad, which is associated with a thumb. A thumb is opposable like our thumb, so check if this is the case.
 - F.) If you've determined this digit, go to the next and follow the steps again.
 - G.) The last 4 digits are the standard toes.

An example of the description of the 2 front paws could be:

Front Left = 1 Dewclaw, 1 Long thumb, 4 Toes. Front Right = 5 Toes.

The Back Paws: Because the hind paws are constructed differently to the fore paws, there are no true "thumbs" on the back feet. The back thumbs do have separate pads, but they differ from the front thumbs, in that they're not opposable and don't stick out at a different angle. So they look the same as an extra toe (meaning pointing straight forward), except for the separate pad not touching the plantar pad or extra toe pads.

Rear thumbs, like front thumbs, are generally two-boned, although in some cases they will be three-boned just like a toe.

An example: *Back Left = 1 Thumb, 4 toes. Back Right = 1 Dewclaw, 4 Toes*

If you find you need to add extra info to explain what you see;

The Polytrak website has additional examples of paw photographs that may assist you in identifying polydactyl expressions. To view these examples just **CLICK HERE** (<http://www.polytrak.net/submit/submit-en/digitexmpl-EN.htm>) and your browser will take you to our polydactyl paw page.

OR

Please do not hesitate to contact us with questions by email. We will be glad to assist you. If possible, it can be helpful to provide a clear photo of the underside of the paw with as much fur brushed out of the way so ALL pads will be visible on the picture. Try not to cover any of the pads as this will make it harder to determine the digits.

The PolyTrak Staff.

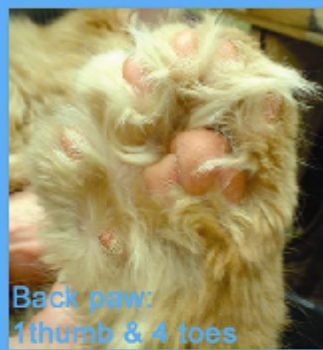
**FOLLOWING ARE SOME PHOTO EXAMPLES OF VARIOUS POLYDACTYLS EXPRESSIONS IN THE
MAINE COON CAT...**



The different type of digits on a poly paw



Maine Coon polydactyl front paws



Maine Coon polydactyl back paws