AMERICAN MUSEUM ŏ NATURAL HISTORY

Sharks and Rays: Myth and Reality

Week 5

Uterus Dissection

Dr. Marcelo Carvalho: Now, we are focusing on the uterus of the shark, where most of the gestation of the embryos occur. In the case of the dogfish [*Squalus acanthius*], that gestation period can be up to 24 months, which is quite long. We're going to cut open the uterus, which is very thin walled, and reveal a large structure termed the candle, which is a large mass of yolk, basically.

The yolk is liquid, of course, in life, but it becomes solid once the specimen is preserved, and we have different embryos that are squished in between different masses of yolk. The embryos here are very small and not discernible at this point, but more than one embryo is associated with this yolk.

Similar to the ovaries we saw earlier, one uterus contains most of the egg masses, here, while the other uterus contains no egg masses, no fertilized eggs whatsoever. One uterus is more functional than the other.

Here we have another female dogfish dissected, and we can see that it is also a gravid female — at a very similar gestation stage as the last female. What we're going to do now is remove the uterus, and place it aside to see the embryos a bit more clearly.

You can see here that the uterine wall is actually very thin, which is very common in most viviparous species, or those species that give birth to live young directly. In exposing the egg mass within the uterus, we can see, for example, one small embryo articulating with one large yolk mass. Here we can see another small embryo connected to another large yolk mass. We can remove this yolk mass, place it aside, where we can see the embryo connected to the yolk sac. The embryo is very small. It will consume the yolk until it is time for it to be born. Here you can see its eye.