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This is the first known sea turtle—and it laid hard eggs

By [Sid Perkins](#) | Dec. 19, 2018 , 7:00 AM

Unlike all modern sea turtles, which lay eggs with soft, pliable shells, the earliest known sea turtle deposited eggs with hard, mineralized shells on the beach, a new study suggests.

The 120-million-year-old fossil (image above) was unearthed in central Colombia more than a decade ago. It belongs to *Desmatochelys padillai*, a species of sea turtle first described from other fossils in 2015. Since then, computerized tomography scans of the new specimen have revealed more than four dozen almost spherical eggs ranging between about 32 and 43 millimeters in diameter (four shown loose at left, above). And other tests,

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including a microscopic look at the mineral structure of the well-preserved eggs, reveals **eggs had rigid shells**, researchers report online today in *Palaeontology*. The membrane that lined the eggshells in life was much thinner than the shells themselves. That’s similar to the proportions seen in hard-shelled turtle eggs of modern-day freshwater or terrestrial species but totally unlike the proportions seen in today’s sea turtles.

It’s unclear why *D. padillai* laid hard-shelled eggs when today’s sea turtles don’t. One possibility is that it’s an evolutionary throwback from softer eggshells from earlier, as-yet-undiscovered species of sea turtles. Or, the rigid shells may have offered increased protection against birds, crabs, or other predators of the era. In either case, *D. padillai* was an evolutionary oddity.

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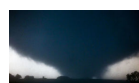
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