

DID HARRIET THE TORTOISE KNOW CHARLES DARWIN?

What is the mystery?

On 23 June 2006 news reports told us that this animal, Harriet, a tortoise at the Australia Zoo in Queensland, had died.

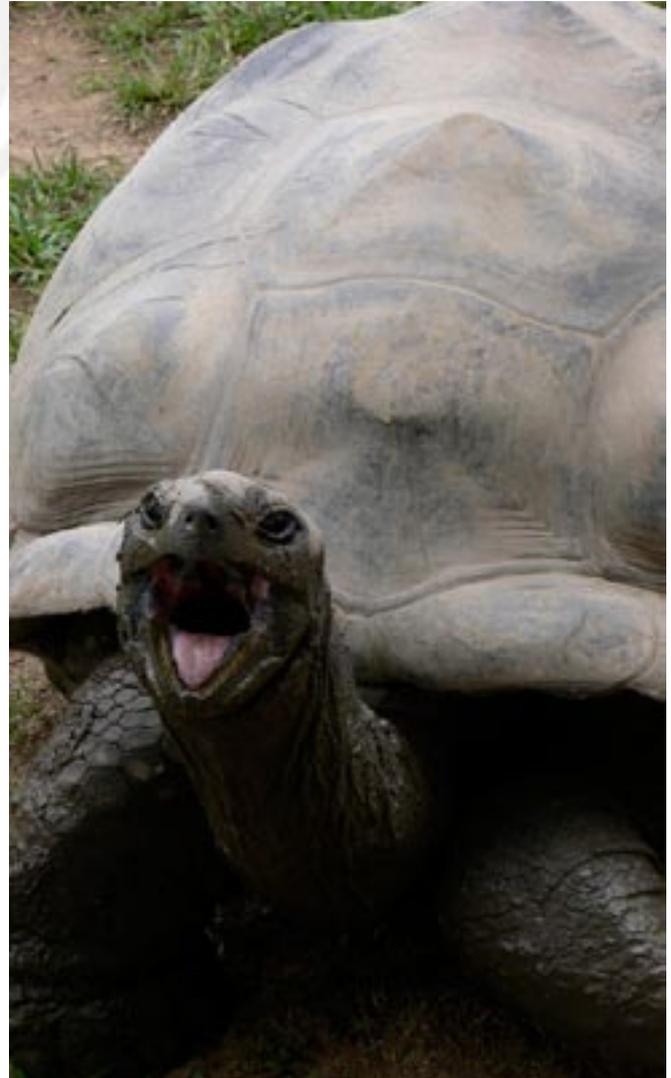
So what?

Well, the report said that the tortoise was 176 years old, was a Galapagos tortoise, and 'it's thought she may have been taken off [Galapagos] by Charles Darwin'.

Darwin visited the Galapagos Islands in 1835.

If the claim is accurate, then Harriet was a very famous animal indeed — the last living creature collected by the famous Charles Darwin.

Is the claim true? Was this an animal that Charles Darwin collected in 1835 during his famous voyage aboard the Beagle? We want you to be a historian, investigate the evidence and decide for yourself!



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Your Task

Here are some statements that must be true for Harriet to have known Charles Darwin.

- Harriet (and the other tortoises you are about to meet) were born about 1830.
- Harriet and the other tortoises were born in the Galapagos Islands.
- Harriet and the other tortoises were collected from the Galapagos Islands by Charles Darwin or one of his colleagues in 1835.
- Charles Darwin gave Harriet and the other tortoises to John Wickham in 1841.
- John Wickham brought Harriet and the other tortoises to Australia in 1841.
- John Wickham gave Harriet and the other tortoises to the Brisbane Botanical gardens in about 1860.
- Tom the tortoise died in 1929.
- Harriet went to the Australia Zoo in about 1990.
- Harriet died there in 2006.

To decide if this sequence of events is true you need to look at the available evidence.

If the evidence supports each statement, then the chain of connection between Harriet in 2006 and Charles Darwin is established. Harriet must have known Charles Darwin.

If the evidence challenges or does not support any of these statements, then there must be doubt that Harriet knew Darwin.

So, to make your decision, you need to:

- 1 - Look at each piece of evidence on the **Evidence Pages**.
- 2 - Decide if the evidence supports or challenges any of the statements. Look at the evidence carefully. You may need to make some decisions about how reliable some of the evidence is. Just because someone says something does not mean it is true! And sometimes some evidence contradicts other evidence. You have to decide to what extent you believe or accept each piece of evidence.
- 3 - Record that evidence on the **Summary Page**. So, for example, you will look at Evidence A to see what it says, and record it in the Supported column for Statement 9 (if you believe the vet!).
- 4 - Then, after you have gone through all the evidence, you will have a summary that provides the best evidence to support or challenge (or both) each statement, and you can come to your informed conclusion. You must be able to explain and justify your conclusion from the evidence.

Good luck with this history mystery!

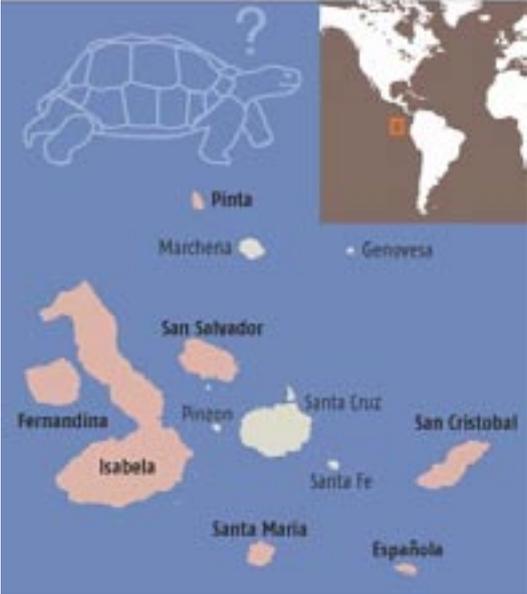
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Evidence Page I

A	Harriet the tortoise dies Senior vet at the Australia Zoo, Dr John Hangar, says Harriet the tortoise died from a heart attack in June 2006.
B	Letter of Ed Loveday, Brisbane historian 'I remember seeing three tortoises in the Brisbane Botanical Gardens when I was a boy. From 1922 there were two, as one died.'
C	John Wickham <ul style="list-style-type: none">• He was aboard the Beagle with Darwin, but was not with the ship when it visited some of the Galapagos Islands in 1835.• He was Captain of the Beagle on a later voyage.• He did not return to England between 1835 and 1841.• He left the Navy and lived in Australia from 1841 to 1870.• He had three tortoises at his home in Brisbane.• He donated them to the Brisbane Botanical Gardens in 1860.
D	Brisbane Museum specimen A preserved tortoise is marked: 'Tom Galapagos died in 1929 Brisbane Gardens. From San Christobel, Galapagos.'
E	Charles Darwin collects tortoises at Galapagos Islands <ul style="list-style-type: none">• Darwin collected three juvenile tortoises (probably about five years old) in the Galapagos Islands in 1835, one from Santa Maria, one from San Cristobel, and one from Santiago.• Others aboard the Beagle also collected some as pets: one by Darwin from San Salvador, one by Syms Covington from Santa Maria, and two by Captain FitzRoy from Espanola.
F	The tortoises land in England <ul style="list-style-type: none">• On his arrival in England Darwin listed two tortoises as specimens collected in 1835 — one from San Sebastian and one from Santa Maria.• Four tortoises were forwarded by Darwin to the British Museum for study.• Two tortoises collected by Captain FitzRoy were dead by 1837.
G	Darwin letter 1860 Darwin wrote a letter saying a scientist friend who was inquiring about tortoises should speak to John Wickham about them as Wickham had them.
H	Darwin letter 1874 Darwin wrote that he did not bring any tortoises home. He remembered that several were brought to England by Captain FitzRoy and the surgeon of the Beagle.
I	Darwin and Wickham After Darwin and Wickham parted on the Beagle voyage before the Galapagos Islands visit in 1835 they did not meet again until 1862.

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Evidence Page 2

J	<p>Harriet's DNA</p> <p>DNA tests show that Harriet was from the Galapagos Island of Santa Cruz, and was probably born before 1835.</p>
K	<p>Other tortoises in Australia</p> <p>Some other Galapagos tortoises were brought to Australia in the nineteenth century in whaling ships.</p>
L	<p>Map of Galapagos islands visited by Charles Darwin</p> <p>Here is a map showing which of the Galapagos Islands were visited by the Beagle in 1835.</p> <div data-bbox="331 808 858 1514"><p>ON THE TORTOISE TRAIL</p><p>The Beagle's crew visited seven of the Galapagos Islands during the 1835 expedition. Was Harriet's island among them?</p></div>

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Summary Page

Statement	Supported	Challenged
1 Harriet and the other tortoises were born about 1830.		
2 Harriet and the other tortoises lived in the Galapagos Islands.		
3 Harriet and the other tortoises were collected from the Galapagos Islands by Charles Darwin or one of his colleagues in 1835.		
4 Charles Darwin gave Harriet and the other tortoises to John Wickham in 1841.		
5 John Wickham brought Harriet and the other tortoises to Australia in 1841.		
6 John Wickham gave Harriet and the other tortoises to the Brisbane Botanical gardens in about 1860.		
7 Tom the tortoise died in 1929.		
8 Harriet went to the Australian Zoo in about 1990.		
9 Harriet died in 2006.		

Your conclusion:

Did Harriet the tortoise know Charles Darwin?

- Definitely yes, because ...
- Probably yes, because ...
- Maybe, because ...
- Probably no, because ...
- Definitely no, because ...
- Cannot tell from the evidence, because ...

Sources of evidence used in this investigation:

- Scott Thomson, Steve Irwin and Terri Irwin, Harriet, 'The Galapagos Tortoise. Disclosing One and a Half Centuries of History.' *Reptilia* Number 2, March/April 1998
- Paul Chambers, 'The origin of Harriet', *New Scientist* 2464 11 September 2004
- Henry Nicholls, 'Tall stories and the twisted history of science', *New Scientist* 2560 15 July 2006
- Harriet (tortoise) Wikipedia entry
- Robin Stewart, *Darwin's Tortoise*, Black Inc, 2005
- Anthony Hill, *Harriet*, Puffin, 2006
- ABC news report www.abc.net.au/news/newsitems/200606/s1670600.htm accessed 27 May 2009
- Wikipedia Commons http://en.wikipedia.org/wiki/File:Harriet_sticking_out_her_tounge.jpg