

Explanation – Vol 1 test 7

Passage 1. Protecting Turtles

1 i	, four turtles have washed up along Irish coasts from Wexford to Kerry. These turtles are more typical of warmer waters and only occur in Irish waters when they stray off course . It is likely that they may have originated from Florida, America. Two specimens have been taken to Coastal and Marine Resources Centre (stored at the National Maritime College), University College Cork, where a necropsy (post mortem for animals) will be conducted to establish their age, sex and their exact origin. During this same period, two leatherback turtles were found in Scotland, and a rare Kemp's Ridley turtle was found in Wales, thus making it an exceptional month for stranded turtles in Ireland and the UK.
2 iv	Actually, there has been extensive research conducted regarding the sea turtles' abilities to return to their nesting regions and sometimes exact locations from hundreds of miles away. In the water, their path is greatly affected by powerful currents. Despite their limited vision, and lack of landmarks in the open water, turtles are able to retrace their migratory paths . Some explanations of this phenomenon have found that sea turtles can detect the angle and intensity of the earth's magnetic fields .
3 ix	. It is thought that after leaving their nesting beach as hatchlings (when they measure 4.5 cm in length), these tiny turtles enter the North Atlantic Gyre (a giant circular ocean current) that takes them from America, across to Europe (Azores area), down towards North Africa, before being transported back again to America via a different current. This remarkable round trip may take many years during which these tiny turtles grow by several centimetres a year. Loggerheads may circulate around the North Atlantic several times before they settle in the coastal waters of Florida or the Caribbean.
4 viii	These four turtles were probably on their way around the Atlantic when they strayed a bit too far north from the Gulf Stream. Once they did, their fate was sealed, as the cooler waters of the North East Atlantic are too cold for loggerheads
5 x	The leatherback, unlike the Green Sea turtle, is not often killed for its meat; however, the increase in human populations coupled with the growing black market trade has escalated their egg depletion . Other critical factors causing the leatherbacks' decline are pollution such as plastics (leatherbacks eat this debris thinking it is jellyfish; fishing practices such as longline fishing and gill nets, and development on habitat areas. Scientists have estimated that there are only about 35,000 Leatherback turtles in the world.
6 iii	We are often unable to understand the critical impact a species has on the environment—that is, until that species becomes extinct. Even if we do not know the role a creature plays in the health of the environment, past lessons have taught US enough to know that every animal and plant is one important link in the integral chain of nature . Some scientists now speculate that the Leatherback may play an important role in the recovery of diminishing fish populations . Since the Leatherback consumes its weight in jellyfish per day, it helps to keep Jellyfish populations in check . Jellyfish consume large quantities of fish larvae. The rapid decline in Leatherback populations over the last

7 35,000	Scientists have estimated that there are only about <u>35,000 Leatherback turtles in the world.</u>
8 the bony carapace	The Leatherback's flippers are the largest in proportion to its body among extant sea turtles. Leatherback's front flippers can grow up to 2.7 meters (9 ft) in large specimens, the largest flippers (even in comparison to its body) of any sea turtle. As the last surviving member of its family, the leatherback turtle has several distinguishing characteristics that differentiate it from other sea turtles. Its most notable feature is that it lacks <u>the bony carapace</u> of the other extant sea turtles
9 water temperatures) However, Loggerhead turtles are not normally found in Irish waters , because <u>water temperatures</u> here are far too cold for their survival . Instead,
10 Florida, America / North America	... During the past month, four turtles have washed up along Irish coasts from Wexford to Kerry. These turtles are more typical of warmer waters and only occur in Irish waters when they stray off course. It is likely that they may have originated from <u>Florida, America</u> ... However, Loggerhead turtles are not normally found in Irish waters, because water temperatures here are far too cold for their survival. Instead, adult loggerheads prefer the warmer waters of the Mediterranean, the Caribbean and <u>North America</u> 's east coast. The four turtles that were found have probably originated from the North American population of loggerheads...
11 magnetic fields	Despite their limited vision, and lack of landmarks in the open water, turtles are able to retrace their migratory paths . Some explanations of this phenomenon have found that sea turtles can detect the angle and intensity of the earth's <u>magnetic fields</u> .
12 (its) meat	Valued as a food delicacy, Leatherback eggs are falsely touted to have aphrodisiacal properties in some cultures. The leatherback, unlike the Green Sea turtle , is not often killed for its meat ; however,
13 jellyfish	. The rapid decline in Leatherback populations over the last 50 years has been accompanied by a significant increase in jellyfish and a marked decrease in fish in our oceans. Saving sea turtles is an international endeavor.

Passage 2. Thoughtful Computing system

14 Not given	YOUR BATTERY IS NOW FULLY CHARGED, ANNOUNCED THE LAPTOP COMPUTER to its owner, Donald A. Norman, with enthusiasm - perhaps even a hint of pride - in its synthetic voice. To be sure, distractions and multitasking are hardly new to the human condition . "A complicated life, continually interrupted by competing requests for attention, is as old as procreation," laughs Ted Selker
15 TRUE	. So although we could simply turn off the phones, close the e-mail program , and shut the office door when it is time for a meeting or a stretch of concentrated work, we usually don't. We just endure the consequences .
16 TRUE	. Microsoft has been running extensive in-house tests of a much more sophisticated system since 2003. Within a few years, companies may be

	able to offer every office worker a software version of the personal receptionist that only corner-suite executives enjoy today .
17 TRUE	Most people aren't as busy as they think they are , which is why we can usually tolerate interruptions from our inconsiderate electronic paraphernalia, James Fogarty and Scott E. Hudson
18 FALSE	. On average, the subjects wanted to work without interruption about one third of the time . In studies of Microsoft employees, Horvitz has similarly found that they typically spend more than 65 percent of their day in a state of low attention .
19 NOT GIVEN	Today's phones and computers , which naively
20 clues	... Bestcom/Enhanced Telephony , a Microsoft prototype based on Horvitz's weak, digs a little deeper into each user's computer to find clues about what they are up to . Microsoft launched
21 relationship	Horvitz himself is one of those testers, and while we talk in his office in Redmond, Wash, Bestcom silently handles one call after another. First it checks whether the caller is listed in his address book, the company directory, or its log of people he has called recently . Triangulating these sources, it tries to deduce their relationship .
22. messages 23. reschedule 24 voice mail	... Family members, supervisors and people he called earlier today ring through. Others see a message on their computer that he is in a meeting and won't be available until 3 PM . The system scans Horvitz's and the caller's calendar and offers to reschedule the call at a time that is open for both . Some callers choose that option; others leave a voice mail .
25 cellphone 26 meeting	When Horvitz is out of the office , Bestcom automatically offers to forward selected callers to his cellphone - unless his calendar and other evidence suggest that he is in a meeting .

Passage 3. Irish ELK

28. 10,500 years ago	... <i>Toothed cats, mastodons, giant sloths, woolly rhinos, and many other big, shaggy mammals are widely thought to have died out around the end of the last ice age, some 10,500 years ago.</i>
29. 400,000 years ago	The Irish elk, so-called because its well-preserved remains are often found in lake sediments under peat bogs in Ireland, first appeared about 400,000 years ago in Europe and central Asia .
30. 8,000 years ago	The eastern foothills of the Urals became very densely forested about 8,000 years ago , which could have pushed them on to the plain ," he said
31. 7,000 years ago	The team, though, said their new date for the Irish elk's extinction hints at an additional human-made problem - habitat destruction . Lister said, "We haven't got just hunting 7,000 years ago this was also about the time the first Neolithic people settled in the region. They were farmers who would have cleared the land ." The presence of humans may help explain why the Irish elk was unable to tough out the latest of many climatic fluctuations - periods it had survived in the past .
32. wooded interglacials	Meanwhile, Lister cast doubt on another possible explanation for the deer's demise - the male's huge antlers . Some scientists have suggested this exaggerated feature the result of females preferring stags with the

	largest antlers, possibly because they advertised a male's fitness - contributed to the mammal's downfall. They say such antlers would have been a serious inconvenience in the dense forests that spread northward after the last ice age. But, Lister said, "That's a hard argument to make , because the deer previously survived perfectly well through wooded interglacials (warmer periods between ice ages)."...
33. habitat destruction	Hunting by humans has often been put forward as a contributory cause of extinctions of the Pleistocene mega fauna . The team, though, said their new date for the Irish elk's extinction hints at an additional human-made problem - habitat destruction . Lister said, "We haven't got just hunting 7,000 years ago this was also about the time the first Neolithic people settled in the region.
34. male's huge antlers	... Meanwhile, Lister cast doubt on another possible explanation for the deer's demise - the male's huge antlers .
35. minerals	High amounts of calcium and phosphate compounds are required to form antlers, and therefore large quantities of these minerals are required for the massive structures of the Irish Elk .
36. B	Some animals may have survived until about 7000 years ago. If people have been in Australia for up to 60 000 years, then megafauna must have co-existed with humans for at least 30 000 years . Regularly hunted modern kangaroos survived not only 10 000 years of Aboriginal hunting, but also an onslaught of commercial shooters.
37. D	Subtropical areas have experienced less radical climatic change . The most dramatic of these changes was the transformation of a vast area of north Africa into the world's largest desert. Significantly, Africa escaped major faunal extinction as did tropical and sub-tropical Asia.
38. A	So you've actually got two phases of extinction . Now, neither of these coincide - these are Neanderthals here being replaced by modern humans. There's no obvious coincidence between the arrival of humans or climatic change alone and these extinctions. There's a climatic change here, so there's a double effect here...
39. C	Significantly, Africa escaped major faunal extinction as did tropical and sub-tropical Asia .
40. A	.. The group of scientists led by A.J. Stuart focused on northern Eurasia, which he was taking as Europe, plus Siberia, essentially, where they've got the best data that animals became extinct in Europe during the Late Pleistocene... There's no obvious coincidence between the arrival of humans or climatic change alone and these extinctions . There's a climatic change here, so there's a double effect here. Again, as animals come through to the last part of the cold stage, here there's a fundamental change in the climate, reorganization of vegetation, and the combination of the climatic change and the presence of humans - of advanced Paleolithic humans - causes this wave of extinction ...