

Two Wings And A Toolkit reading passage

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Alex Kacelnik, an animal behaviour expert in Oxford University has captive crows namely Betty and Abel. Both belong to the *Corvus moneduloides* (forest-dwelling species of bird) which are inhabiting two islands in the South Pacific. New Caledonian crows predate in a tenacious manner and these birds widely detect the self-made tools to find food.

Crochet hook is one of the brilliant tools of the wild crows. It is made by separating the side twig from a larger one and leaving the larger twig required to shape it into a hook. There is another cunning tool made from barbed vine-leaf, it contains a central rib associated with paired leaflets each with a thorn at its base. Wild crows remove all the leaflets and what remains is one thorn at the top. It results in a ready-made hook which will be helpful for picking out the insects from awkward cracks.

The crows also make an innovative tool named padanus probe made from padanus tree leaves. The tool has the following characteristics: broad base, sharp tip, a row of tiny hooks along one edge and the crow creates a tapered shape by nipping and tearing to construct a progression of three or four steps across the other edge of the leaf. This tool is regarded as special as it is manufactured based on a standard design which follows a set of instructions. Though it is not easy to catch a crow while it is clip out a padanus probe, we do have a lot of proof to prove their workmanship. The impressive thing is crows are consistently producing the same design at each and every time. This made the researchers to think whether the crows are capable of creating a vision and performing action according to that. Research reveals that genetics also influence the finches in the Galapagos islands which make less sophisticated tool making skills. But it is highly improbable whether this is same also for New Caledonian crows, like, its tool making skills are hardwired into its brain.

"Food in a bucket at the bottom of a well" challenge is offered to Betty and Abel as a test at Oxford by Kacelnik. The only method to get the food is by hooking the bucket out by its handle. Choice of tools is given: a straight length wire and one with a hooked end. The birds picked the hook immediately which shows that they can understand the functional properties of the tool.

It seems that they have the foresight and creativity to plan the construction of their tools. In one bucket in the well test, Abel took the hooks and what remains for Betty is nothing but the straight wire. Kacelnik exclaims, "What happened next was absolutely amazing". She inserted the tip of the wire into a crack in a plastic dish and pulled the other end to create her own version of hook. Wild crows aren't able to get bendable material which retains its shape, and the similar experience encountered by Betty is with some pipe cleaners a year earlier. In ten further tests, she made a hook and took the bucket in nine tests.

To know what is actually happening in the crow's mind will take time and numerous experiments have to be done, but we could get a lesson based on our understanding of our own evolution.

Our ancestors might not have the sophisticated mental abilities which helped them to create symmetrical tools with carefully worked edges about some 1.5 million years ago. Analysing the New Caledonian crows closely might have helped us to give clues about the special attributes they would have needed. Kacelnik says, 'If we're lucky we may find specific developments in the brain that set these animals apart'.

This could be the result of a strong degree of laterality which means the specialisation of one side of the brain to perform particular tasks. For people, the left side of the brain is responsible for processing complex consequential tasks which include language and speech. Interestingly, Biologists have found that most padanus probes are cut from the left side of the leaf which means it used the right side of their beaks. The team thinks it reflects the fact that crow's left side of the brain is specialised to handle the sequential processing to make complex tools.

What conditions lay out a reason for emergence of the extraordinary talent for those two species ? Both are social creatures and have a wide range of feeding habits. These factors are likely to be important. But, it could be their limitation that triggered the evolution of toolmaking. Both the ancestors of crows and humans might be in the position where they aren't able to make the physical adjustments needed to survive. So, it becomes necessary to change their behaviour. This stage could set them to get cognitive skills which produce sophisticated tools. Those crucial skills could have been found from the New Caledonian crows.

Two Wings And A Toolkit IELTS Reading Questions

Questions 1 - 5

Do the following statements agree with the information given in the reading passage?

Write

- **TRUE** if the statement agrees with the information
 - **FALSE** if the statement contradicts the information
 - **NOT GIVEN** if there is no information on this in the passage
1. Betty and Abel are sea-dwelling species of bird.
 2. One of the tools of crows is crochet hook which contains a central rib with paired leaflets.
 3. Wild crows aren't able to live in tropical rainforests.
 4. In people, the left side of the brain is responsible for processing complex consequential tasks.
 5. Crow's shortcomings could have set an evolution for toolmaking.

Questions 6 - 9

Complete the sentences below.

Write **NO MORE THAN THREE WORDS** from the passage for each answer.

6. Betty and Abel are forest-dwelling species confined to two islands in _____.
7. Cunning tool which is made from _____ which contains central ribs with paired leaflets with a thorn at its base.
8. Choice of tools given in the bucket in the well test are _____ and one with a _____.
9. The ancestors of humans and crows might not be able to make _____ required for survival.

Questions 10 - 13

Complete each sentence with the correct ending, **A–F**, below.

Write the correct letter, **A–F**, as your answer to each questions (10-13)

10. Crochet hook is made by separating the side twig from a larger one and...
11. The crows' innovative tool named padanus probe is..
12. Research reveals that genetics plays a role in the finches in the Galapagos islands which..
13. Biologists have found that most padanus probes are cut from...

- A. inserting it into the crack of the plastic dish
- B. the left side of the leaf which means it used the right side of their beaks.
- C. leaving the larger twig required to shape it into a hook.
- D. made from padanus tree leaves.
- E. right side of the brain is active
- F. make less sophisticated tool making skills.