



Cow Uses Tools in Groundbreaking Scientific Discovery

Description

Cows have now been observed using tools intentionally, showcasing adaptability rarely noted in non-primates. A Swiss Brown cow named Veronika has participated in a series of controlled experiments that reveal this surprising capability.

Cognitive biologist Alice Auersperg from the University of Veterinary Medicine Vienna highlights that this discovery challenges existing assumptions about livestock intelligence, suggesting that prior limitations in understanding may stem from inadequate observations rather than a lack of cognitive capacity.

Historically, humans have viewed themselves as the only species capable of deliberate tool use, a position that has been reassessed following findings about various non-primates, such as crows and orcas. Although cows are often underestimated, evidence indicates they may possess sophisticated behavioural skills.

Veronika belongs to Austrian farmer and baker Witgar Wiegele, who has long observed her using sticks to scratch difficult-to-reach itches. Intrigued by a video of this behaviour, Auersperg and colleague Antonio Osuna-Mascaró designed experiments to assess Veronika's tool-use abilities.

In these experiments, Veronika encountered an asymmetrical broom featuring stiff bristles on one end and a handle on the other. Researchers hoped to determine whether she would use the broom consistently to scratch her itches. Over seven sessions, Veronika scratched herself 76 times with the broom, outperforming expectations.

She demonstrated a nuanced understanding by employing the brush end for her thicker skin and the handle for more sensitive areas, illustrating context-sensitive tool use. Osuna-Mascaró noted that Veronika's tool use reflected her awareness of the outcomes of her actions, adapting her movements based on the situation.

The ability to use tools for multiple purposes is uncommon in the animal kingdom, primarily observed in chimpanzees. However, the researchers believe that Veronika's longevity and environment may have enhanced her skills. They encourage the public to report any similar observations of purposeful tool use among cattle.

Vocabulary List:

1. **Adaptability** /ædæp'tæbɪlɪti/ (noun): The ability to adjust to new conditions.
 2. **Reassessed** /,ri:ə'sɛst/ (verb): Evaluated again often to change a previous opinion or conclusion.
 3. **Cognitive** /'kɒɡ.nɪ.tɪv/ (adjective): Relating to the mental processes of perception memory judgment and reasoning.
 4. **Sophisticated** /sə'fɪs.tɪ.keɪ.tɪd/ (adjective): Complex or intricate; showing refined knowledge and understanding.
-



-
5. **Purposeful** /'pɜ:.pəs.fəl/ (adjective): Having a determined and intentional quality.
6. **Context-sensitive** /'kɒn.tɛkst 'sɛn.sɪ.tɪv/ (adjective): Dependent on the context or situation in which something occurs.

Comprehension Questions

Multiple Choice

1. Who is the cognitive biologist mentioned in the text?

- Option: Alice Auersperg
- Option: Antonio Osuna-Mascaró
- Option: Witgar Wiegele
- Option: Veronika

2. What type of cow was involved in the experiments?

- Option: Swiss Brown cow
- Option: Holstein cow
- Option: Ayrshire cow
- Option: Friesian cow

3. What was the tool used by Veronika in the experiments?

- Option: Broom
- Option: Rake
- Option: Shovel
- Option: Hammer

4. Where does Veronika belong?

- Option: Austria
- Option: Switzerland
- Option: Germany
- Option: France

5. How many times did Veronika scratch herself with the broom in the experiments?

- Option: 57 times
- Option: 64 times
- Option: 76 times
- Option: 82 times



6. What did Veronika use the brush end of the broom for?

- Option: Scratching sensitive areas
- Option: Scratching thick skin areas
- Option: Cleaning herself
- Option: Eating

True-False

7. Cows have been historically regarded as highly intelligent animals.
8. The researchers believe Veronika's environment may have hindered her tool-use skills.
9. Chimpanzees are the only animals known to use tools for multiple purposes.
10. Veronika scratched herself 70 times in the experiments.
11. Veronika adapted her movements based on the situation she was in.
12. The public is encouraged to report any observations of purposeful tool use among cows.

Gap-Fill

13. Cognitive biologist Alice Auersperg is from the University of Veterinary Medicine

_____.

14. Veronika scratched herself with the broom on _____ occasions during the experiments.

15. Veronika's owner, Witgar Wiegele, observed her using _____ to scratch difficult-to-reach itches.

16. The asymmetrical broom used in the experiments had stiff bristles on one end and a _____ on the other.

17. The researchers hope that the public will report any _____ observations of tool use



among cattle.

18. Veronika demonstrated context-sensitive tool use by using the brush end for her thicker skin and

_____ for more sensitive areas.

Answer

Multiple Choice: 1. Alice Auersperg 2. Swiss Brown cow 3. Broom 4. Austria 5. 76 times 6. Scratching thick skin areas

True-False: 7. False 8. False 9. False 10. False 11. True 12. True

Gap-Fill: 13. Vienna 14. 76 15. sticks 16. handle 17. similar 18. the handle

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)

1. Which trait refers to the ability to adjust to new conditions?

Option: Cannabidiol

Option: Adaptability

Option: Therapeutic

Option: Innovative

2. What is the term for explaining or clarifying a concept?

Option: Nuanced

Option: Elucidate

Option: Imperceptible

Option: Jurisdictions

3. Which type of psychology focuses on observable behaviors?

Option: Behavioural

Option: Infiltrate

Option: Context-sensitive

Option: Kinematic

4. Changes resulting in profound shifts are known as:

Option: Engender

Option: Transformations

Option: Cognitive



Option: Luminosity

5. Which word means to increase rapidly in numbers?

- Option: Conundrum
- Option: Proliferates
- Option: Corroborate
- Option: Serendipitous

6. What term relates to processes involving perception and reasoning?

- Option: Equilibrium
- Option: Cognitive
- Option: Cannabidiol
- Option: Diligent

7. Which word describes the atmosphere or mood of a place?

- Option: Ambience
- Option: Culminated
- Option: Antigenic
- Option: Phenotype

8. What is the term used to describe areas or domains of authority?

- Option: Therapeutic
- Option: Efficacy
- Option: Jurisdictions
- Option: Assumptions

9. Something that is extremely difficult to detect is said to be:

- Option: Imperceptible
- Option: Kinematic
- Option: Diligent
- Option: Antigenic

10. What term describes the introduction of new ideas or methods?

- Option: Innovative
- Option: Nuanced
- Option: Conundrum
- Option: Elucidated

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)



11. Many scientific theories are based on _____ that serve as starting points for research.
12. The concept of supply and demand is often used to explain market _____.
13. _____ equations describe motion without considering the forces causing it.
14. The discovery of penicillin was a _____ result of Alexander Fleming's accidental observations.
15. The professor _____ the complex theory in a way that all students could understand.
16. Solving this philosophical _____ requires deep contemplation and critical thinking.
17. Scientists seek to _____ their findings through repeated experiments and data analysis.
18. The _____ of the stars in the night sky depends on their size and temperature.
19. Months of hard work and preparation _____ in a spectacular performance.
20. Success in any field often requires a _____ work ethic and focus.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

| |
|--|
| 21. The effectiveness of the teaching method depended on considering the unique circumstances of each student. |
| 22. To foster a sense of unity and collaboration among team members the leader worked diligently to promote mutual respect. |
| 23. The calming music had a soothing and healing effect on the patients aiding in their recovery process. |
| 24. The drug's ability to produce the desired results was tested rigorously by the research team before it was approved for use. |
| 25. The spy managed to penetrate the enemy's defenses and gather crucial information without being detected. |



- | |
|---|
| 26. The artist's painting depicted subtle variations in color and shading showcasing the complexity of the subject. |
| 27. The cozy cafe had a warm and inviting atmosphere making it a favorite spot for locals to relax and socialize. |
| 28. The company's groundbreaking technology revolutionized the industry setting new standards for efficiency and creativity. |
| 29. The study focused on the potential health benefits of the natural compound found in cannabis plants. |
| 30. The observable traits of an organism influenced by both genetic and environmental factors make up its distinct characteristics. |

Answer

Multiple Choice: 1. Adaptability 2. Elucidate 3. Behavioural 4. Transformations 5. Proliferates 6. Cognitive 7. Ambience 8. Jurisdictions 9. Imperceptible 10. Innovative

Gap-Fill: 11. Assumptions 12. Equilibrium 13. Kinematic 14. Serendipitous 15. Elucidated 16. Conundrum 17. Corroborate 18. Luminosity 19. Culminated 20. Diligent

Matching sentence: 1. Context-sensitive 2. Engender 3. Therapeutic 4. Efficacy 5. Infiltrate 6. Nuanced 7. Ambience 8. Innovative 9. Cannabidiol 10. Phenotype

CATEGORY

1. Health - LEVEL6

POST TAG

1. animal intelligence
2. Clever Cow
3. ESL learning
4. esl news
5. Level 6
6. tool use

Tags

1. animal intelligence
2. Clever Cow
3. ESL learning
4. esl news
5. Level 6
6. tool use

Date Created



2026/01/22

Author

aimeeyoung99

ESL-NEWS.COM