

## Koalas hug trees to stay cool

6<sup>th</sup> June, 2014



Scientists have unlocked one of the secrets as to how koalas stay cool and avoid dehydration in the intense heat of Australian summers. They hug trees. For

decades people thought the cuddly marsupials clung to trees simply because they were tired and wanted somewhere to nap. Researchers from Melbourne University have now cast new light on the tree-hugging habits of the koala. Lead researcher Natalie Briscoe said there is a five-degree difference in temperature between a tree trunk and the air. Koalas utilize the cooler surface by spreading themselves out on large branches or by hugging the trunk. Ms Briscoe said: "Access to these trees can save about half the water a koala would need to keep cool on a hot day."

Briscoe studied the behaviour of 37 koalas on an island off the Melbourne coast. She is part of a team trying to identify how koalas might survive higher temperatures brought by global warming. Her observations and conclusions regarding the cooling effects of the trees came as a surprise to her. She noted that the koalas sat upright in cooler weather, hugged branches when it became warmer, and then wrapped themselves around the tree trunk when it got hot. The animals even moved to different trees that had cooler trunks. She said the trees are probably cooler because of the water they suck up from the ground. The koala's cooling technique could be one way for humans to survive increasingly hot summers.

Sources: *Sydney Morning Herald* / *LiveScience* / *NewScientist*

## Writing

Compare and contrast summer and winter. Which do you prefer? Why?

## Chat

Talk about these words from the article.

*scientists / secret / dehydration / intense heat / cooler / branches / water / a hot day / behaviour / survive / global warming / warmer / water / ground / technique*

## True / False

- Scientists have discovered a secret about koalas. T / F
- For decades, people thought koalas hugged trees to avoid dehydration. T / F
- A tree trunk is around five degrees cooler than the air around it. T / F
- Hugging trees means koalas don't have to drink as much water. T / F
- A research team studies the behaviour of 370 koalas. T / F
- Scientists were investigating how koalas could survive global warming. T / F
- The koalas stayed in their favourite eucalyptus trees to stay cool. T / F
- The article said trees are cooler because they reflect the sun's rays. T / F

## Synonym Match

- |              |                      |
|--------------|----------------------|
| 1. secrets   | a. conserve          |
| 2. avoid     | b. thrown            |
| 3. cuddly    | c. erect             |
| 4. cast      | d. steer clear of    |
| 5. save      | e. establish         |
| 6. behaviour | f. mysteries         |
| 7. identify  | g. in all likelihood |
| 8. upright   | h. huggable          |
| 9. probably  | i. get through       |
| 10. survive  | j. actions           |

## Discussion – Student A

- What springs to mind when you hear the word 'koala'?
- What do you know about koalas?
- What do you think of the research in the article?
- What do you do to keep cool?
- Will you try hugging a tree when it gets really hot?
- Do you prefer very hot summers or very cold winters?
- How could researchers use their findings to help humans?
- How would you survive the heat in the countryside?

# BreakingNewsEnglish - The Mini Lesson

## Phrase Match

1. unlocked one
  2. stay cool and
  3. cast new
  4. a five-degree difference
  5. save about half the
  6. trying to identify how
  7. observations and
  8. water they suck
  9. cooling
  10. survive increasingly
- a. in temperature
  - b. conclusions
  - c. water a koala would need
  - d. technique
  - e. light on
  - f. of the secrets
  - g. hot summers
  - h. avoid dehydration
  - i. up from the ground
  - j. koalas might survive

## Discussion – Student B

- a) How good a job is studying koala behaviour?
- b) How will humans survive higher temperatures?
- c) How does your body shape change in the cold or heat?
- d) What other things could we hug to stay cool (or keep warm)?
- e) What do you do when it gets really hot?
- f) Are there other benefits to hugging a tree?
- g) How many ways can water keep us cool?
- h) What questions would you like to ask the researchers?

## Spelling

1. avoid ondrdhaiyte in the intense heat
2. the dcydlu marsupials clung to trees
3. Lead ecersrrhea
4. a five-degree difference in teauemprtr
5. Koalas utilize the cooler ruacfes
6. ecassc to these trees
7. the iorhevbua of 37 koalas
8. trying to dnfiteiy how koalas might survive
9. observations and Inoiossnucc
10. koalas sat ightpur in cooler weather
11. wpedapr themselves around the tree trunk
12. The koala's cooling hueictnqe

### Answers – Synonym Match

1. f	2. d	3. h	4. b	5. a
6. j	7. e	8. c	9. g	10. i

## Role Play

### Role A – Use a fan

You think using a fan is the best way to keep cool. Tell the others three reasons why. Tell them things that aren't so good about their things. Also, tell the others which is the least effective of these (and why): drinking cold water, wearing cotton or avoiding alcohol and coffee.

### Role B – Drink cold water

You think drinking cold water is the best way to keep cool. Tell the others three reasons why. Tell them things that aren't so good about their things. Also, tell the others which is the least effective of these (and why): using a fan, wearing cotton or avoiding alcohol and coffee.

### Role C – Wear cotton

You think wearing cotton is the best way to keep cool. Tell the others three reasons why. Tell them things that aren't so good about their things. Also, tell the others which is the least effective of these (and why): drinking cold water, using a fan or avoiding alcohol and coffee.

### Role D – Avoid alcohol and coffee

You think avoiding alcohol and coffee is the best way to keep cool. Tell the others three reasons why. Tell them things that aren't so good about their things. Also, tell the others which is the least effective of these (and why): drinking cold water, wearing cotton or using a fan.

## Speaking – Staying Cool

Rank these with your partner. Put the best ways to stay cool in summer at the top. Change partners often and share your rankings.

- use a fan
- sit in the shade
- wear fewer clothes
- drink cold water
- avoid coffee and alcohol
- wear cotton
- spray water on your face
- go to a shopping mall

### Answers – True False

a	T	b	F	c	T	d	T	e	F	f	T	g	F	h	F
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Answers to Phrase Match and Spelling are in the text.