

## Massive coral reef found in Amazon River

25th April, 2016



An international team of scientists has discovered a huge coral reef in the Amazon River. The team from the universities of Georgia in the USA and Rio de Janeiro in Brazil was on an expedition to learn

more about Amazon River plumes when it made the discovery. Plumes are the areas close to where a river meets the sea and the river's freshwater mixes with the saltwater of the ocean. The reef system spans an area of 5,800 square kilometres, stretching from the coast of French Guiana to the rainforest of the Brazilian state of Maranhao. The finding has surprised marine biologists because reefs are rarely found in large rivers as the water is usually too muddy and dark, and does not contain enough salt.

The scientists only explored 10 per cent of the reef. They said there were many sponges, creatures and other marine life that had adapted to life in the darker waters. They also recorded 73 species of reef fish, many of them carnivorous. Researcher Dr. Patricia Yager enthused about what she had seen. She said: "We brought up the most amazing and colorful animals I have ever seen on an expedition." Sadly, not all news about the reef is good. The whole area has been earmarked for oil exploration. Dr Yager warned that: "From ocean acidification and ocean warming to plans for offshore oil exploration right on top of these new discoveries, the whole system is at risk from human impacts."

Sources: [cnn.com](http://cnn.com) / [NationalGeographic.com](http://NationalGeographic.com) / [Guardian.com](http://Guardian.com)

## Writing

All exploration near coral reefs should be banned. Discuss.

## Chat

Talk about these words from the article.

*team / scientists / coral / reef / expedition / discovery / area / biologists / muddy / sponges / marine life / darker / species / carnivorous / amazing / exploration / risk*

## True / False

- The research team consisted of two different universities. T / F
- The team originally went to investigate plumes of smoke. T / F
- The reef stretches from French Guiana. T / F
- Reefs rarely form in rivers because of insufficient salt. T / F
- The scientists have explored over half the reef. T / F
- The scientists have found 730 species of fish. T / F
- The article says there is nothing but good news about the reef. T / F
- The reef is at risk from oil exploration. T / F

## Synonym Match

- |                |                |
|----------------|----------------|
| 1. discovered  | a. animals     |
| 2. expedition  | b. discovery   |
| 3. mixes       | c. set aside   |
| 4. finding     | d. meat-eating |
| 5. enough      | e. unearthed   |
| 6. creatures   | f. entire      |
| 7. adapted     | g. sufficient  |
| 8. carnivorous | h. journey     |
| 9. earmarked   | i. adjusted    |
| 10. whole      | j. combines    |

## Discussion – Student A

- What do you think scientists will find in the unexplored 90% of the reef?
- What would you like to see up close in the ocean, and why?
- What kind of expedition would you like to go on?
- What will happen to the reef if oil exploration goes ahead?
- What does global warming do to reefs?
- How do humans impact coral reefs?
- What other reefs do you know about?
- What questions would you like to ask the researchers?

## Phrase Match

- |                                      |                            |
|--------------------------------------|----------------------------|
| 1. An international team             | a. in large rivers         |
| 2. spans an area of                  | b. for oil exploration     |
| 3. marine                            | c. enough salt             |
| 4. reefs are rarely found            | d. species of reef fish    |
| 5. does not contain                  | e. 5,800 sq kilometres     |
| 6. adapted to life in                | f. risk from human impacts |
| 7. They also recorded 73             | g. of scientists           |
| 8. The whole area has been earmarked | h. warming                 |
| 9. ocean                             | i. biologists              |
| 10. the whole system is at           | j. the darker waters       |

## Discussion – Student B

- What is the job of reefs?
- Why has it taken so long to find this reef?
- What would it be like to be on a River Amazon expedition?
- How important is the River Amazon?
- What do you know about rainforests?
- What do marine biologists do every day?
- What are the differences between life in rivers and the sea?
- What do you think about what you read?

## Spelling

- An international team of tiecssitsn
- on an dntxoeiip
- when it made the codyiesvr
- an area of 5,800 uarseq kilometres
- the acost of French Guiana
- marine goisobtils
- there were many enpsgso
- srracute and other marine life
- 73 pscisee of reef fish
- many of them ivcsrrouona
- oil opnaertxiol
- at risk from human icpmats

### Answers – Synonym Match

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

## Role Play

### Role A – Reefs

You think reefs are the best watery places. Tell the others three reasons why. Tell them why their places aren't so good. Also, tell the others which is the least interesting of these (and why): lakes, waterfalls or oases.

### Role B – Lakes

You think lakes are the best watery places. Tell the others three reasons why. Tell them why their places aren't so good. Also, tell the others which is the least interesting of these (and why): reefs, waterfalls or oases.

### Role C – Waterfalls

You think waterfalls are the best watery places. Tell the others three reasons why. Tell them why their places aren't so good. Also, tell the others which is the least interesting of these (and why): lakes, reefs or oases.

### Role D – Oases

You think oases are the best watery places. Tell the others three reasons why. Tell them why their places aren't so good. Also, tell the others which is the least interesting of these (and why): lakes, waterfalls or reefs.

## Speaking – Water

Rank these with your partner. Put the best water forms at the top. Change partners often and share your rankings.

- |              |          |
|--------------|----------|
| • ponds      | • reefs  |
| • oases      | • rivers |
| • waterfalls | • lakes  |
| • puddles    | • seas   |

### Answers – True False

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| a | T | b | F | c | T | d | T | e | F | f | F | g | F | h | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Answers to Phrase Match and Spelling are in the text.