


**Direct Link:** http://www.scientificamerican.com/article/coral-reefs-show-remarkable-ability-to-recover-from-near-death/

# Coral Reefs Show Remarkable Ability to Recover from Near Death

This informational text resource is intended to support reading in the content area. When corals are stressed, they release their algal partners and turn white, a phenomenon called coral bleaching. This occurs when they are under stress from warming waters or other environmental factors. Researchers monitored reefs in the Seychelles during and after coral bleaching events, and found that several factors, including depth of growth, branching shape, nutrient levels, and amount of fish grazing accurately predicted whether reefs were likely to recover from these events. Human impacts such as sediment or nutrient run-off also affect the corals' resiliency.

## General Information

**Subject(s):** Science, English Language Arts
**Grade Level(s):** 11, 12
**Intended Audience:** Educators

**Resource supports reading in content area:** Yes

**Keywords:** coral reefs, global warming; climate change, human impacts, coral bleaching, biotic factors, abiotic factors
**Instructional Component Type(s):** Text Resource

**Resource Collection:** STEM Reading Resources

## Attachment

Qualitative_Rubric_Coral_Bleaching.pdf
Text_Dependent_Questions_Coral_Bleaching.pdf
Final_Recommendation_Placement_Coral-Bleaching.pdf

## Additional Information/Instructions

***By Author/Submitter***
The grade band recommendation reflects the shifts inherent in the standards and is based on a text complexity analysis of a quantitative measure, qualitative rubric, and reader and task considerations.

## Source and Access Information

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**District/Organization of Contributor(s):** Florida State University


## Aligned Standards

| Name | Description |
|---|---|
| LAFS.1112.RST.1.1: | Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account. |
| LAFS.1112.RST.2.4: | Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 11–12 texts and topics. |
| LAFS.1112.RST.4.10: | By the end of grade 12, read and comprehend science/technical texts in the grades 11–12 text complexity band independently and proficiently. |
| LAFS.1112.WHST.1.2: | Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes.<br>a. Introduce a topic and organize complex ideas, concepts, and information so that each new element builds on that which precedes it to create a unified whole; include formatting (e.g., headings), graphics (e.g., figures, tables), and multimedia when useful to aiding comprehension.<br>b. Develop the topic thoroughly by selecting the most significant and relevant facts, extended definitions, concrete details, quotations, or other information and examples appropriate to the audience's knowledge of the topic.<br>c. Use varied transitions and sentence structures to link the major sections of the text, create cohesion, and clarify the relationships among complex ideas and concepts.<br>d. Use precise language, domain-specific vocabulary and techniques such as metaphor, simile, and analogy to manage the complexity of the topic; convey a knowledgeable stance in a style that responds to the discipline and context as well as to the expertise of likely readers.<br>e. Provide a concluding statement or section that follows from and supports the information or explanation provided (e.g., articulating implications or the significance of the topic). |
| LAFS.1112.WHST.3.9: | Draw evidence from informational texts to support analysis, reflection, and research. |
| SC.912.L.17.5: | Analyze how population size is determined by births, deaths, immigration, emigration, and limiting factors (biotic and abiotic) that determine carrying capacity.<br>**Clarifications:**<br>Annually assessed on Biology EOC. Also assesses SC.912.L.17.2; SC.912.L.17.4; SC.912.L.17.8; SC.912.N.1.4. |
| SC.912.L.17.16: | Discuss the large-scale environmental impacts resulting from human activity, including waste spills, oil spills, runoff, greenhouse gases, ozone depletion, and surface and groundwater pollution.<br>**Clarifications:**<br>Integrate HE.912.C.1.3. Evaluate how environment and personal health are interrelated; and, HE.912.C.1.5. Analyze strategies for prevention, detection, and treatment of communicable and chronic diseases. |