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STEMBoost Newsletter

Brought to you by the STEMBoost Editorial Team

March Updates!

Joseph Lee, Chief Editor

On March 11, Kennedy Middle School emerged triumphant at the Santa Clara Science Olympiad Regional Competition, winning 1st place overall and a spot to compete at the NorCal State competition alongside two other schools from the area, Miller and Churchill Middle School, which placed 2nd and 3rd place respectively.

Medaling in 21 out of 23 events, with 10 of them being 1st place medals, the Kennedy Gold team ended with an outstanding score of 55 points at the competition.

Given that 2023 marks the year that Science Olympiad is making a full return to in-person competitions, we hope that all participants will be able to stay healthy while delivering their best efforts in the upcoming competitions.

Is Fishing for Fun a Problem?

Irene Tian, Editor

Fishing, as an activity, may not initially appear problematic for the ocean. However, the issue lies in the concept of overfishing, which occurs when fish are caught at a rate faster than their populations can replenish. The consequences of overfishing extend far beyond the ocean itself: billions of people rely on fish for protein, while millions depend on fishing for their livelihood. Alarmingly, the Food and Agriculture Organization of the United Nations reports that the number of overfished stocks globally has tripled within just half a century.

However, subsistence and commercial fishing is only one side of the story. Studies have found that recreational fishing actually contributes to the annual catch of nearly one million tons of fish, causing a much greater effect on oceanic species than previously understood. This sizable quantity accounts for roughly 1% of the total global marine fisheries catch.

Recreational fishing also poses a threat to vulnerable fish populations, even in areas where commercial fisheries are prohibited. In fact, the pursuit of rare fish is often driven by the desire for prestige and the potential for higher market value. Trophy anglers intentionally target the largest individuals within a population, disregarding the fact that these individuals are often the most reproductively successful. This fishing preference removes the fittest members from the population, in contrast to commercial or subsistence fishing, which primarily aim to maximize catch quantities. While scientists and environmentalists often emphasize the dangers of commercial and industrial overfishing, this may downplay the ecological impact of recreational fishing. Numerous factors associated with recreational fishing contribute to its ecological and economic consequences. A study published in the journal Fish and Fisheries highlights the need to address the governance of recreational fisheries and suggests several guidelines for improvement, including clearly defining recreational angling in national legislation, emphasizing its distinction from commercial fishing, and implementing scientific monitoring of fish populations targeted by recreational fishing. As with everything in our environment, we need to recognize the importance of government in addressing how individual actions, when multiplied, can collectively pose a significant threat to marine species.

Sources:

https://www.worldwildlife.org/threats/overfishing
https://therevelator.org/recreational-fishing-environmental-impact/
https://doi.org/10.1111/faf.12417