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Integrated Writing 75

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Based on the reading passage, the Northern Pacific sea stars are a harmful threat to the marine ecosystem. Therefore, in line with this, scientists are consequently researching approaches to controlling the population of sea stars, and they have suggested some solutions. However, the professor, in the lecture, cast doubt on those methods, suggesting three reasons as to why they seem ineffective.

The first method mentioned in the reading is using quicklime poison as a way of reducing the invaded area of sea star life. This point was challenged in the lecture, as this poison can spread over large areas of the seafloor and it doesn't harm other marine life, such as mollusks. The reading does not take into consideration that the professor mentioned that the poison remains active where it is used. This will be a problem for native sea stars, as the poison kills other native sea stars that are critical for maintaining the local ecosystem. When they move to the area of the dead sea stars, they will also die. This method is refuted in the lecture.

Although it is suggested in the reading that introducing a natural enemy, such as parasites, to infect the male reproductive system of sea stars could decrease populations of invaded seafloors. This point is rebutted by the lecture, as solutions do not completely destroy male northern sea stars. Another point mentioned to question the validity of this claim is that male sea stars will fertilize the eggs of the female. Hence, the fact that parasite methods cannot make effective control.

The author of the reading passage asserts that sterilizing ballast water using chemical materials on ships can prevent the spread of sea star larvae to new habitats. This point is further called into question in the lecture on the grounds that Northern Pacific sea star larvae have the ability to stick to objects such as ships or boats. In fact, the reading fails to consider that invasive sea star larvae, which can attach to ships or boat equipment, will continue to spread to other locations regardless of whether ships sterilize their ballast water or not. Thereby, the validity of this point is also in question.