

A Study on the Species Diversity in Ponds with and without Bullfrogs in Jeju Island

Kim, Minbeom (School: Daykey High School)

Park, Su-Sung (School: Daykey High School)

Shin, Hee Do (School: Daykey High School)

Late 1970s, bullfrogs brought in Jeju as a food, but recently their commercial value disappears, so they were thrown out. At this present they live in pond around Hangeong-myeon and Daejeong-eup (areas where bullfrogs live) and disturb ecosystem. In fact, the interesting thing we found is that Bullfrogs live in our school pond. So we can observe easily day by day, and check the degrees of effects they have affected ecosystem. These are motivations why we started our research with 'Bull frogs'. The study was conducted by investigating six ponds located in Jeju Island, South Korea. We compared the species diversity of each pond with and without bullfrogs, and program each data by program. We identified the organisms by referring to an illustrated guide and internet. Unidentifiable ones were classified by asking expert opinions. Small sized ones were identified with a dissecting microscope or by studying their distinct characteristics found in enlarged photographs and comparing them with pictured in the illustrated guide. Also, we analyzed and compared the species diversity and population of the record with an analysis program SPSS. Our study is expected to inspire the growing students with the importance of ecosystem equilibrium and provide basic data for bullfrog research projects in the future.