List of Dissertation Abstract　(Department of Natural Environment)			
Name	Supervisor	Title	Abstract
Faruque　Md. Hasan	Hiroyuki Matsuda	Vulnerability Assessment for Hilsa (*Tenualosa ilisha*) and its Data-limited Bycatch Stocks from Hilsa Gillnet Fishing of Bangladesh	A total of 130 species included target species, Hilsa (*Tenualosa ilisha*), were reported from Hilsa gillnet fishing of Bangladesh, where 74 bycatch stocks and the Hilsa, were subjected to vulnerability assessment using productivity susceptibility analysis (PSA). Hilsa was found to be moderately vulnerable to gillnet fishing. The majority of the bycatch were found to be highly susceptible to fishing. This study suggested that the exploitation rate associated with overfishing corresponds to the vulnerability (V) scores, and species with $V > 1.8$ mostly showed decreasing catch trend. This analysis emphasized the need for improved data collection on species-specific life-history traits. Our analysis suggested that conservative scoring approach in PSA could overestimate species vulnerability.

Kawakami Yoshitaka	Ryoji Wani	Reconstruction of life histories of Late Cretaceous lytoceratids (Ammonoidea, Cephalopoda), revealed from shell morphological change through ontogeny	Ammonoids are an extinct group of cephalopods that lived from Devonian to the end of the Cretaceous. Most ammonoids have been suggested to have planktic life habits just after hatching. This study discussed the relationship between the ontogenetic trajectories of shell morphology and the post-embryonic life habits in Late Cretaceous lytoceratid ammonoids. The analyses of septal spacing and whorl expansion rate suggest that lytoceratids had a longer duration of planktic post-embryonic stage, compared with other Cretaceous ammonoids.
Natsukawa Haruki	Hiroyuki Matsuda	Evaluating the efficacy of top predators as biodiversity indicators	Identifying efficient biodiversity indicators is a key pillar of the global conservation strategy. Top predators have been proposed as reliable biodiversity signposts, but their role is controversial. Here, I verified their performance by conducting case studies and reviewing published studies and found solid support for their efficacy as biodiversity indicators. Efficacy was stronger for taxonomic groups that highly interacted with the predator and declined for the diversity of groups that less interacted with the predator. These results show that, on average, top predators are justified candidates as biodiversity indicators. However, in practice, conservationists should check the compatibility of the biodiversity components linked to the predator with the established conservation objectives.