

Urassaya Boonpramuk 2010: Foraging Characteristics of Migrant Shorebirds
(Genus *Calidris*) in Salt Pans Area at Ban Khok Kham, Samut Sakhon Province.
Master of Science (Zoology), Major Field: Zoology, Department of Zoology.
Thesis Advisor: Assistant Professor Surapol Ardsungnoen, Ph.D. 133 pages.

Foraging methods of shorebirds Genus *Calidris* were characterized on the traditional salt pans area during migration periods, September 2008 - April 2009 on Inner Gulf of Thailand, Ban Khok Kham, Samut Sakhon province, Central Thailand. The objective of this study was to describe the prey searching methods and feeding methods of Genus *Calidris*, including density and biomass of macrobenthic fauna in salt pans area. In the present study, demonstrate that 8 *Calidris* species fed only on the evaporation pans. They used pecking and surface sew in wet mud and emergent sediments, routing in algae mass, probing , deep sew, sweeping and plunging in an open shallow water. The time spent foraging did not show significant difference between the time before, during and after high tide in Rufous-necked Stint and Long-toed Stint ($p>0.05$) while Curlew Sandpiper showed significant difference between the time ($p<0.05$). The proportion of time spent foraging was significantly maximum in during high tide than other time.

Three phyla of macrobenthic fauna were found in evaporation pans; classified into five classes nine orders with the total twelve families namely Nereidae, Capitellidae, Spionidae, Hydrophilidae, Dytiscidae, Culicidae, Chironomidae, Dolichopodidae, Ceratopogonidae, Ephydriidae, Corixidae and Ranidae. The average density and biomass of macrobenthic fauna were approximately 938.60 ± 210.51 individual/square meter (mean \pm S.E.) and 0.1149 ± 0.02 g ash-free dry weight/square meter respectively. *Calidris* arrived at the study area in September while macrobenthic fauna had a maximum density ($p<0.05$) and also Little Stint and Rufous-necked Stint showed a maximum rate of surface sewing method in this month. The diversification of substrate and macrobenthic fauna in evaporation pans were supplementary feeding niche to Genus *Calidris* and also suggest that salt pans area support foraging microhabitat for Genus *Calidris*.

Student's signature

Thesis Advisor's signature