

Detailed Ecological character description

Based on a 2006-2007 comprehensive survey,

Flora

A botanical survey undertaken by Seoul Metropolitan Government has reported a total of 178 vascular plants species including aquatic plants. The representative species were Korean willows (*Salix koreensis*), pussy willows (*Salix gracilistyla*), common reeds (*Phragmites communis*), mugworts (*Artemisia selengensis*), hops (*Humulus japonicus*), reed canary grass (*Phalaris arundinacea*), silver banner grass (*Miscanthus saccharifloru*) and bulrush (*Scirpus radicans Schkuhr*). Korean willows grow widespread all the time in higher elevation. *Miscanthus sacchariflorus* (Maxim.) dominate in the mid-point of height in the islets whereas bottomland soils are occupied by common reeds (*Phragmites communis*). Mugwort favouring heavy moisture flourishes in May during a rainfall season, and its widespread growth began to decline in June; eventually is replaced by other herbaceous populations such as hops (*Humulus japonicas*). When severe floods occur, the higher survival rates of mugwort (*Artemisia selengensis*), water pepper (*Persicaria hydropiper*) and northern marsh yellowcress (*Rorippa islandica*) populations overrides other plant populations on the islets. At the time, Korean willow populations also die back and subsequently decline in size. In the context of biodiversity maintenance on a longer timeframe, water fluctuation and flooding help enhance plant diversity by inhibiting expansion of predominant species and allowing for inflow of new seeds into the islets.

Mammals

There have not been resident mammals recorded on the islets. A few rodent caves have been found, but it is presumed that rodents were accidentally swept away by flooding currents to reach the wetlands especially during heavy storms.

Birds

A total of 47 bird species are identified on the site, and the wetlands are an important wintering habitat for many waterfowls, such as pintails (*Anas acuta*), pochards (*Aythya farina*), common teal (*Anas creca*) and mallards (*Anas platyrhynchos*). Especially in summer, the islets are a breeding ground for seasonal birds, such as black-crowned night herons (*Nycticorax nycticorax*), grey herons (*Ardea cinerea*), spotbills (*Anas poecilorhyncha*), mallards (*Anas platyrhynchos*), great reed warblers (*Acrocephalus orientalis*) and vinous-throated parrotbill (*Paradoxornis webbianus*). Pheasants (*Phasianus colchicus*), Rufous turtle doves (*Streptopelia orientalis*), Black-billed magpie (*Pica pica*) and Eurasian Tree Sparrow (*Passer montanus*) have been common terrestrial species found across the seasons.

In addition, the wetlands allow seasonal migratory birds such as Spot-billed Duck (*Anas poecilorhyncha*) and Black-crowned Night Heron (*Nycticorax nycticorax*) to sustain its populations by utilizing nesting and rearing capacity that the wetlands offer. In the 2006 - 2007 survey, the counts and percentages of the populations of these two species were 545 (15.88%) and 124 (3.61%) respectively occupying the first and the second highest portions of total 3432 populations counted. (new text)

Fish

There are 39 fish species recorded around Bamseom, including the representative species such as steed barbels (*Hemibarbus labeo*), ussurian bullheads (*Leiocassis ussuriensis*), mandarin fish (*Siniperca scherzeri*), skygazers (*Erythroculter erythropterus*) and goby minnows (*Pseudogobio esocinus*). Of these, the endemic fishes were 4 species: Korean striped bitterling (*Acheilognathus yamatsutae*), Korean spined bitterling (*Acanthorhodeus gracilis*), the oily shiner (*Sarcocheilichthys*

variegatus microoculus), and Korean oily shiners (*Sarcocheilichthys nigripinnus morii*). The ecotone between upper and lower Bamseoms is well-developed and home to a wide variety of aquatic flora. The waters between upper Bamseom and lower Bamseom are shallow and have a mild flow velocity, creating a primary spawning ground for fishes of Han River.

Other plants and animals

Bamseom has 18 benthic invertebrate species and 44 terrestrial insect species recorded and below are the verified benthic invertebrate species that inhabit the islets. Of terrestrial insect species, Diptera, Homoptera, and Lepidoptera are the most abundant taxonomic groups. Soft-shelled turtles (*Trionyx sinensis*), and Reeve's turtles (*Geoclemys reevesii*), have been found within the proposed Ramsar Site. The exotic Red-eared sliders (*Trachemys scripta elegans*) are also recorded.

Annelida: *Chaetogaster limnaei*, *Limnodrilus gotoi*, *Limnodrilus sp.1*, *Neanthes japonica*

Mollusca: *Physa acuta*, *Limnoperna fortune*, *Anodonta woodiana*, *Anodonta arcaeformis*, *Corbicula fluminea*

Arthropoda: *Eriocheir sinensis*

Aquatic Insects: *Cercion calamorum*, *Cercion hieroglyphicum*, *Stylurus annulata*, Chironomidae sp.1. sp2. Sp3. Sp4. Sp6