STATUS OF THE PRESERVATION AND MANAGEMENT OF THE SPOON-BILLED SANDPIPER

Seocheon-gun
Seocheon-gun: Introduction

Status and features of the

Status of the introduction to the Seocheon-gun mud

Protection management s

Protective policy on the s

Other information
Seocheon-gun, Chungcheongnam-do

- Located at the mouth of Geumgang River, which is famous for seafood
- Rich in culinary and cultural resources
- Home to many relics of traditional culture
- Rich in ecological resources
- (mountain, ocean, and river all in one place!)
- Administrative districts: two eup, 11 mels
- Seocheon-eup (center of county) can be reached from anywhere in under 30 minutes.
- Area: 358.0 sq. km.
- Population: 52,805 (as of Dec. 2019)
- Known for Hansan ramie cloth, Hansang (rice wine), laver, rice, mosi songpyeong, and anchovies, etc.
Status and features of the Seocheon-gun mudflats
Biodiversity of Seocheon Getbol

- Benthic Diatoms: **181 species**
- Primary Production: **37.6 ~ 162.1 mg/m² (82.0 mg/m² on average)**
- Marine Macroalgae: **49 species**
- Halophyte: **27 species**
- Macrobenthos: **181 species (1,736 ind./m²)**
- Waterbirds: **85 species /147,873 ind.**
Ecological and economic value of the Seocheon-gun mudflats

Conversion of the value of the Seocheon-gun mudflats according to socioeconomic standards shows that it holds great value in terms of: local residents, tourism activities, seasonal birds, and shellfish.

Amount citizens are willing to pay (KRW)

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Seasonal birds</td>
<td>Maintenance of the seasonal bird population of the Yubudo/Seocheon mudflats at 90,000</td>
<td>12,817</td>
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<tr>
<td>Shellfish</td>
<td>Annual production of 100 tons of shellfish (harvested from respective mudflats)</td>
<td>10,288</td>
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<td>Tourism activities</td>
<td>Annual average of 50,000 tourists visiting for mudflats exploration/experience, etc.</td>
<td>14,033</td>
</tr>
<tr>
<td>Local residents</td>
<td>Maintenance of 1,000 households that fish for a living</td>
<td>32,327</td>
</tr>
</tbody>
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Outcomes of analysis of average amount citizens are willing to pay (mudflats fund) per person based on national sample

The ecological value of the Seocheon-gun mudflats is estimated to be (approx.) USD 232.3 billion per year.
Regulation: Seocheon mudflats reduce the effects of global warming (by absorbing carbon, etc.).

Support: Seocheon mudflats are a habitat for many life forms.

Regulation: Seocheon mudflats reduce pollution levels.

Culture: Seocheon mudflats offer interactive tourism resources.

Support: Seocheon mudflats offer rest areas for seasonal birds.

Supply: Seocheon mudflats produce shellfish (clams, oysters, etc.).

Culture: Seocheon mudflats are beautiful.

Culture: Seocheon mudflats are an effective educational resource.

Culture: Seocheon mudflats embody local traditions.
Status of longbills/sandpipers in the Seocheon-gun mudflats (2016-2018)

Legend
- Property Area
- Buffer Zone
- Swan Goose
- Saunter's Gull
- Eurasian Oystercatcher
- Spoon-billed Sandpiper
- Grey-tailed Tattler
- Chinese Egret
- Red Knot
- Curlew Sandpiper
- Great Knot
- Far Eastern Curlew
- Black-faced Spoonbill
- Red-necked Stint
- Spotted Greenshank
- Bar-tailed Godwit

Year | Mid of March | Mid of April | Beginning of May | End of August | Beginning of Sept | End of Sept. | Mid of Oct. | Mid of October
--- | --- | --- | --- | --- | --- | --- | --- | ---
2016 | 9 species 8,151 ind. | 22 species 46,348 ind. | 21 species 41,113 ind. | 21 species 18,123 ind. | 24 species 22,173 ind. | 20 species 17,728 ind. | 18 species 24,122 ind. | 18 species 24,122 ind. |
2018 | 9 species 7,533 ind. | 19 species 49,015 ind. | 20 species 24,003 ind. | 21 species 17,150 ind. | 22 species 18,999 ind. | 17 species 18,894 ind. | 15 species 16,569 ind. | 15 species 16,569 ind. |


- 날찍부리도요, 붉은어깨도요, 알락꼬리마도요
- 노랑발도요, 큰빚부리도요, 흰꼬리도요, 마도요
- 붉은가슴도요, 붉은갯도요, 좀도요, 검은머리물떼새 청다리도요사촌 (IUCN RED LIST)
Outcomes of civilian monitoring of spoon-billed sandpiper

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</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>8</td>
</tr>
</tbody>
</table>

Aug. 31, 2019 (Yubudo Island)
Protection management system for the Seocheon-gun mudflats
Protection and management

- In recognition of its outstanding conservation value (based on the economic benefits for local residents and value as a home to diverse life forms), an area of 15.3 square kilometers was designated as a protected wetland for the prevention of damage and sustainable use of the Seocheon-gun mudflats (2008).
- 2009: Designated as Ramsar Wetland to enable consistent management.
- 2010: Mouth of Geumgang River registered on East Asia/Oceania Flyway website.
- 2011: Yubudo Island registered on East Asia/Oceania Flyway website.
- 2018: Area of the Seocheon-gun mudflats expanded to 68.09 sq. km.
- 2018: Designated as UNESCO Natural Heritage candidate.
- 2019: On-site inspection of mudflats for designation as UNESCO Natural Heritage completed.
Protection policy for the spoon-billed sandpiper

1. Preservation as first priority
   - Given the high value of the mudflats as a natural resource, the maintenance of the current situation is viewed as the best protective measure (as opposed to change, which may result in a decrease in value).
   - Efforts are being made to shift the direction of current policy toward the formation of a social consensus on the high preservation value of the mudflats and, ultimately, the investment of more resources toward preservation-based enhancement.
   - The aim is to establish legal grounds for the preservation of mudflat habitats and life forms in order to guarantee the maintenance of mudflat quality.
2. Facilities to prevent the erosion of coastal wetlands

- Artificial structure installed (120,000 sq. m.) to prevent wetland erosion and create a stable saltwater wetland via natural sedimentation
- Stability of the wetland ecosystem secured and its biodiversity enhanced
3. Creation of buoy-type artificial rest areas

- Establishment of artificial (buoy-type) rest areas for spoon-billed sandpipers in cooperation with Birdlife International
- Provision of space for birds to rest during high tide
- Monitoring outcome: approx. 600 birds confirmed to be using rest areas (as of Sept. 2019)
- Location: Oknam-li, Maseo-myeon, Seocheon-gun, and one other location
- Budget: KRW 45 million (donation from Birdlife International)
- Area: 525 sq. m. (three areas of 175 sq. m. each)
4. Consistent monitoring of spoon-billed sandpipers
- Quarterly monitoring and writing of reports on the movements of spoon-billed sandpipers at Yubudo Island and the Seocheon mudflats
- Intensive monitoring in fall, which is when spoon-billed sandpipers come to Korea in large numbers, in order to accurately ascertain population size

▶ Joint monitoring (Russia-Korea): Establishment of bilateral cooperative network based on the fact that the Seocheon mudflats are a stopover site for spoon-billed sandpipers, for which preservation efforts are currently being made in Russia
Cooperative systems with international bodies

Seminar with international experts on seasonal bird habitats

Welcome to the Birds

본 세미나는 철새의 경로 내 다수의 파트너쉽 국가와 당체가 참여하는 국제 철새의 인식 증진 행사인 "Welcome to the Birds"의 국내 행사의 일환으로 개최됩니다.
Educational activities to raise awareness of the spoon-billed sandpiper
Figure 1. BirdLife International volunteers manning the Birdlife stand at MOF World Wetlands Day event at MABIK, Seocheon, ROK.
Promotional efforts to protect the spoon-billed sandpiper
Our Programs

Expert Program
Bird Watching in Yubudo
The wildlife birding program without disturbances people and nature each other in Yubudo where various migrant and migratory birds flock.

(Student Program) Journey to The World with longbill (Scolopacidae):
The program which follows the flyway of the longbill along the East Asia to Oceania in National Institute of Ecology where is consist of 5 climate Biome.

Who are you, Seasheon tidal flat?
Inspire the students that people are intimately connected to protist, benthic invertebrates, fishes and birds.

Program For General
Eco-Bird Watching:
Understanding wildlife of migrant and migratory birds through the birding, and realizing function of their habitat.

Seocheon-gun Bird Eco Exhibition Hall
Providing environmental education and enhancing public awareness of the environment as the province education centre.

Constructing relationships, examining biological resources and data constructing as the wetland reserve centre of Korea.

Training environment interpreters and wetland interpreters.

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YUBUDO
(island)

‘where birds and people complete one another’

Spoon-billed Sandpiper

SEOCHONCOUNTY
The mudflats of Yubudo Island represent not only an invaluable way of life for the island residents but are also an asset that must be handed down to future generations.

Thank you for your attention.