

**Case Study of
Integrated Wetland Management
at Yatsu Tidal Flat
with YNOC**

1. *The Profile of YATSUHIGATA* (*Yatsu Tidal Flat*)



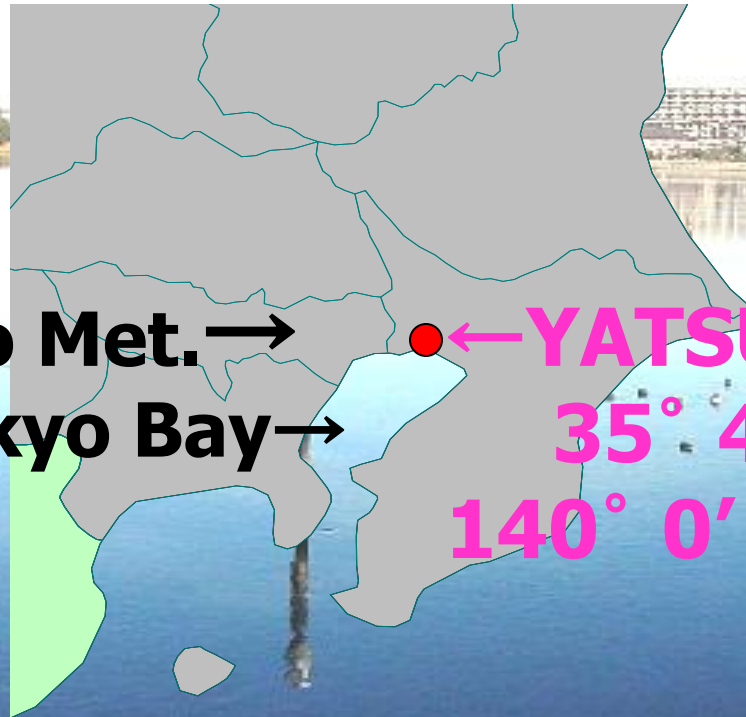
Tokyo Met. →

Tokyo Bay →

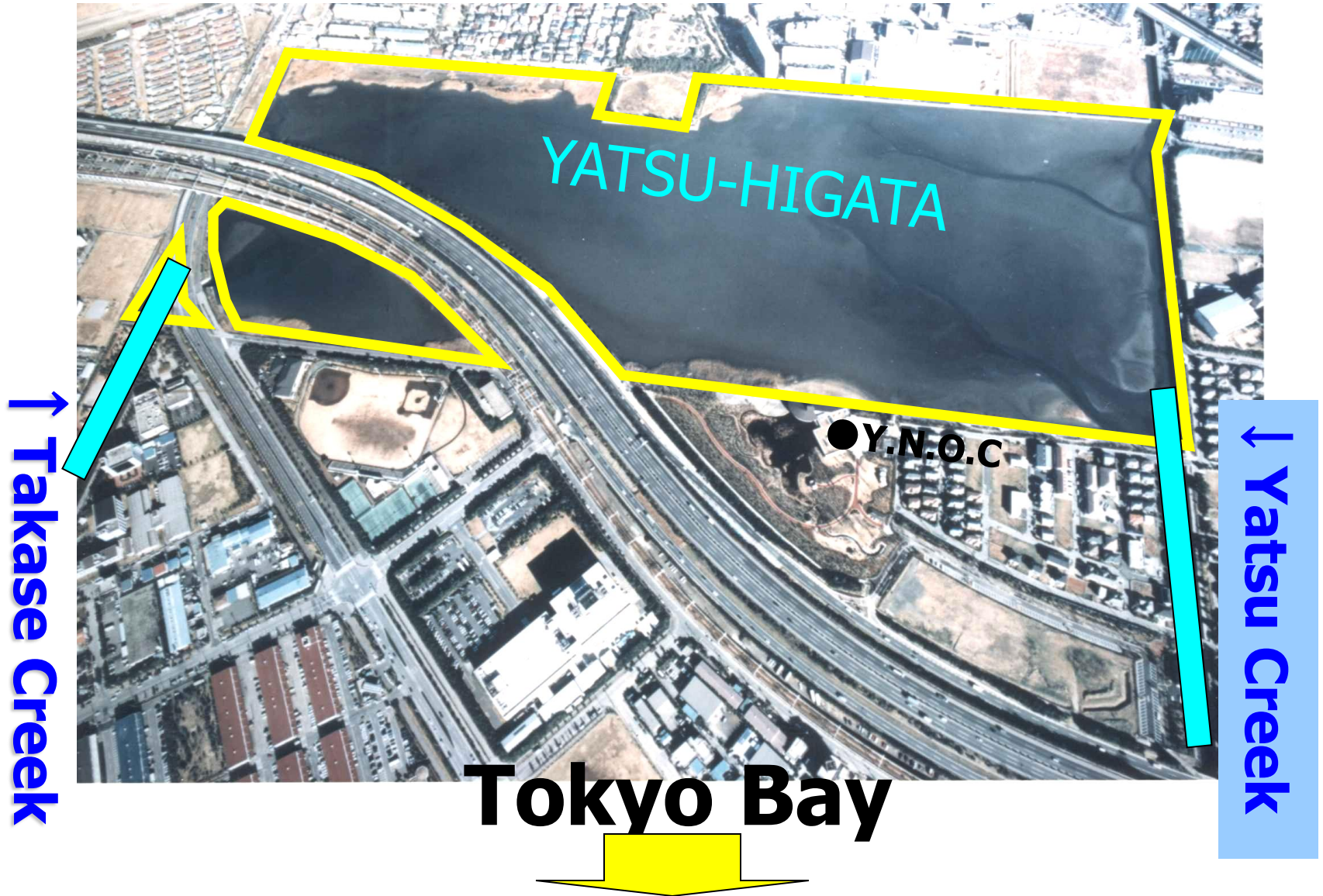
← YATSU-HIGATA

35° 40' 31" N

140° 0' 11" E



The Present YATSUHIGATA



Transition of Coastline



1971



1974

An aerial photograph of a city, likely Tokyo, showing a large river (Arakawa River) and a complex highway interchange. The city is densely packed with buildings, and a large stadium is visible on the left side of the image. The text is overlaid on the image in various colored boxes.

Road to Preservation

1971-

Protection activities by local people
and conservation groups

1993 Ramsar site

1994 YNOC was established

1996 The East Asian and Australasian
Shorebirds Flyway Network site

2. Participation of Local People

Key words

Local People/Groups

Facility Volunteer

Coordination and Training

Rehabilitation Program

Interpretation



Walk-in observation



Dramatic picture show



Bush mowing





Guide walk

Wetland explorer



Coordination & Training

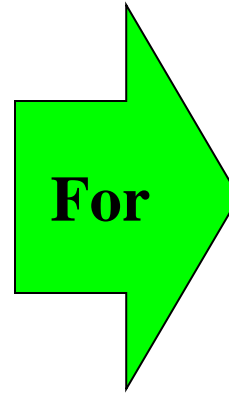
**Interpretation training
for beginner**



**Monitoring benthos
training**

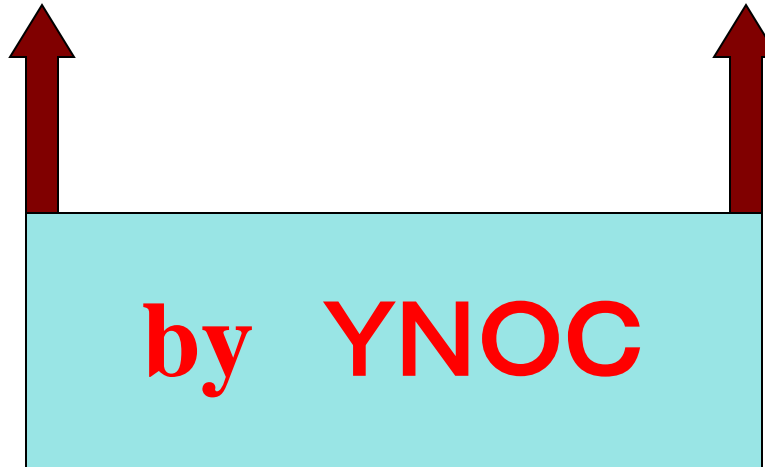
Volunteer Activities

- Interpretation
- Group activities
- Supporting for event etc.



Visitors
&
Conservation

Coordination
&
Training



Rehabilitation Program



- Three years program

2001-2003

- Involvement of local people



3. Research and Monitoring

Key words

Wastes

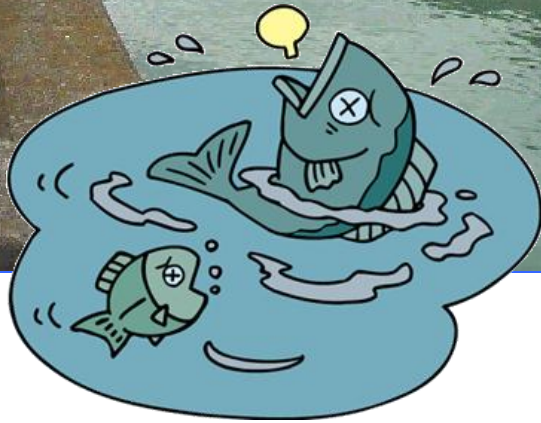
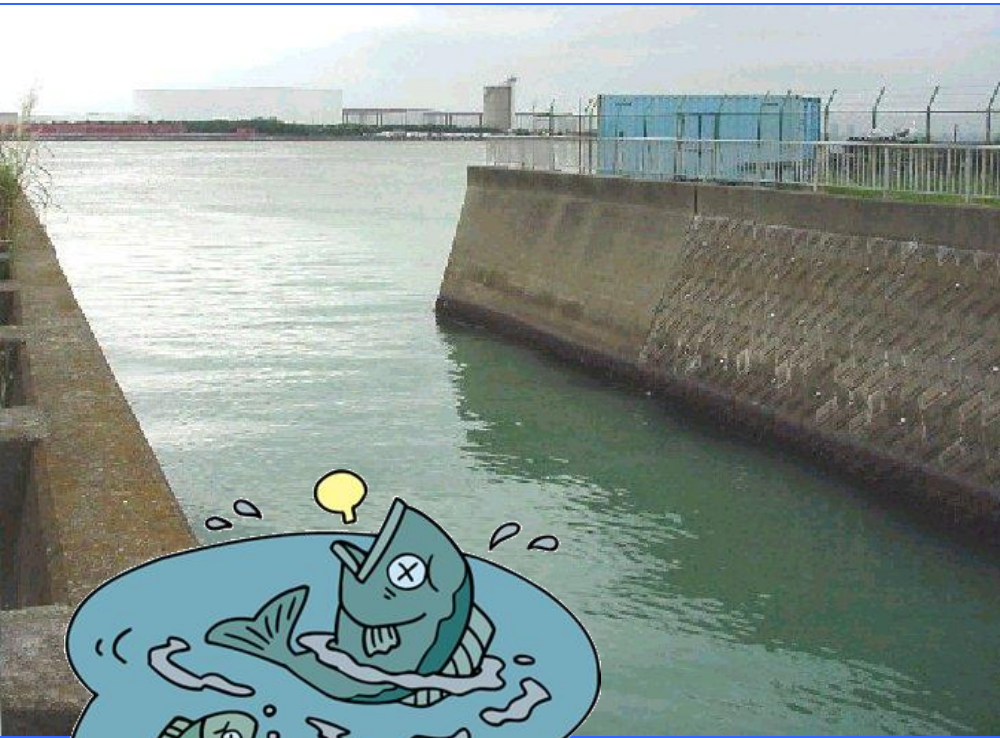
Blue Tide

Sediment

Ulba pertusa

Population Clash on Shorebirds

Blue Tide & Changing of Sediment



Green Tide caused by *Ulva pertusa*



Collecting *Ulva*



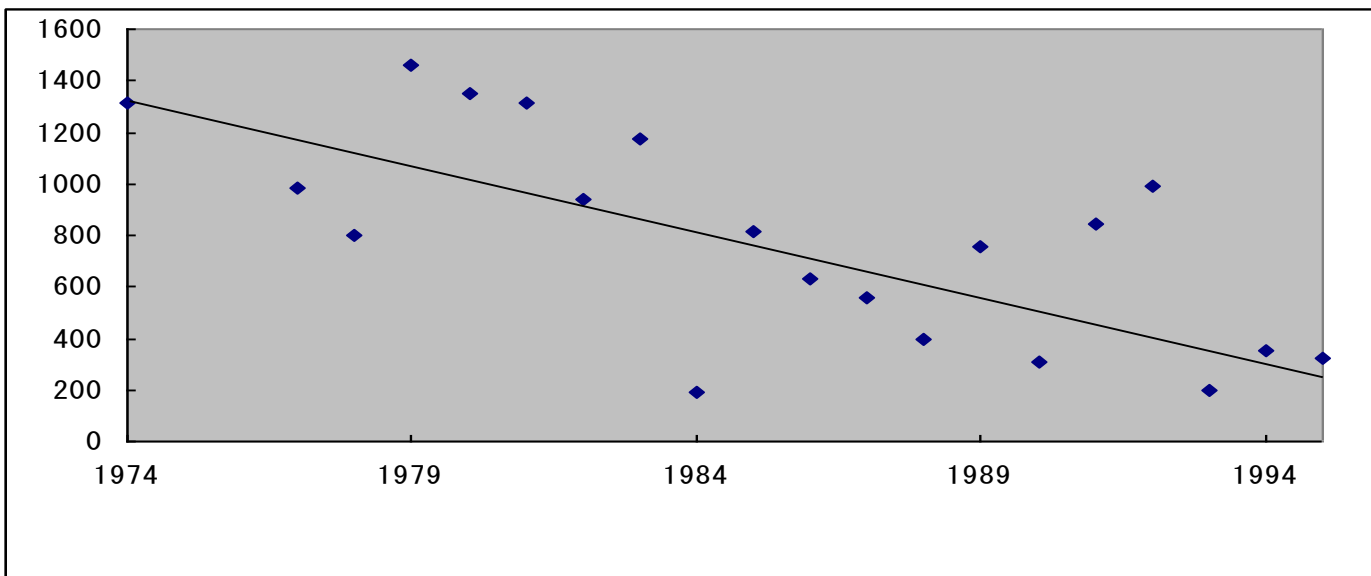


Fig.1. Relationship between number of migratory waders and years in spring

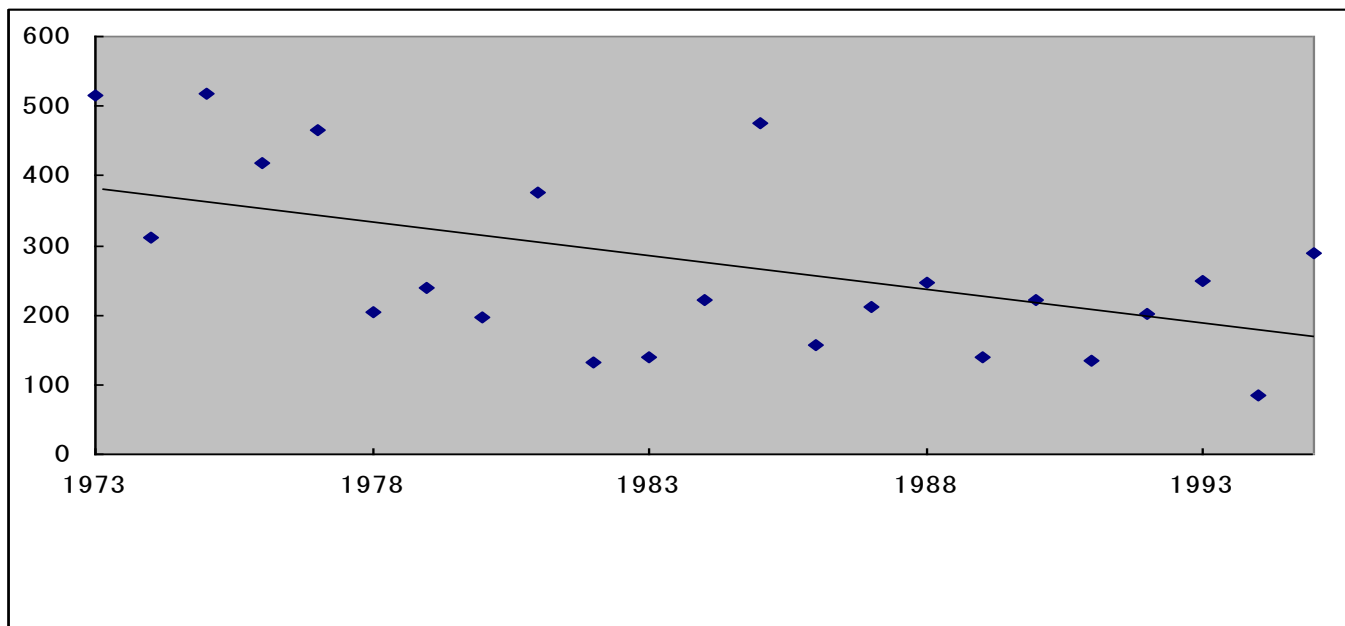


Fig.2. Relationship between number of migratory waders and years in autumn

Table.1

Table1. Tendency for the population changes on each wader species recorded in spring and autumn from 1973 to 1995 by the simple linear regression analyses.					
Species		Spring		Autumn	
Japanese name	Latin name	Fcal	Tendency	Fcal	Tendency
シロサギ	<i>Charadrius dubius</i>	0.87	↑	1.41	↑
モンゴルシロサギ	<i>Charadrius mongolus</i>	19.13	↓ < 0.001	7.922	↓ < 0.025
シロサギ	<i>Pluvialis dominica</i>	-	-	5.987	↓ < 0.025
シロサギ	<i>Arenaria interpres</i>	31.6	↓ < 0.001	11.63	↓ < 0.005
シロサギ	<i>Calidris Ruficollis</i>	1.396	↑	0.359	↑
シロサギ	<i>Calidris acuminata</i>	-	-	1.89	↑
シロサギ	<i>Calidris canutus</i>	-	-	2.42	↑
シロサギ	<i>Calidris tenuirostris</i>	8.72	↓ < 0.01	0.526	↑
シロサギ	<i>Calidris alba</i>	0.876	↑	1.13	↑
シロサギ	<i>Limicola falcinellus</i>	-	-	2.57	↑
シロサギ	<i>Tringa erythropus</i>	-	-	7.88	↓ < 0.025
シロサギ	<i>Tringa nebularia</i>	-	-	12.52	↓ < 0.005
シロサギ	<i>Tringa glareola</i>	-	-	16.08	↓ < 0.001
シロサギ	<i>Heteroscelus brevipes</i>	1.41	↑	24.14	↓ < 0.001
シロサギ	<i>Actitis hypoleucos</i>	-	-	35.25	↓ < 0.001
シロサギ	<i>Xenus cinereus</i>	-	-	0.025	↑
シロサギ	<i>Limosa limosa</i>	-	-	0.025	↑
シロサギ	<i>Limosa lapponica</i>	0.023	↑	0.35	↑
シロサギ	<i>Numenius phaeopus</i>	4.01	↑	6.17	↓ < 0.025
シロサギ	<i>Phalaropus bbatus</i>	-	-	4.58	↓ < 0.05

In the Table2., ↑ shows increase, ↓ shows decline, NS means None Significant.

4. Domestic and International cooperation

Key words

Migratory Shorebirds Education Project

Teaching Material

Inter-NGOs

Workshop

Shorebirds Network Site Training Course

Grey-tailed tattler



Mongolian plover



Shorebirds



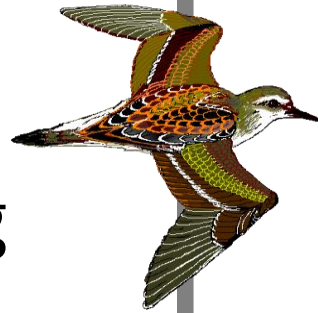
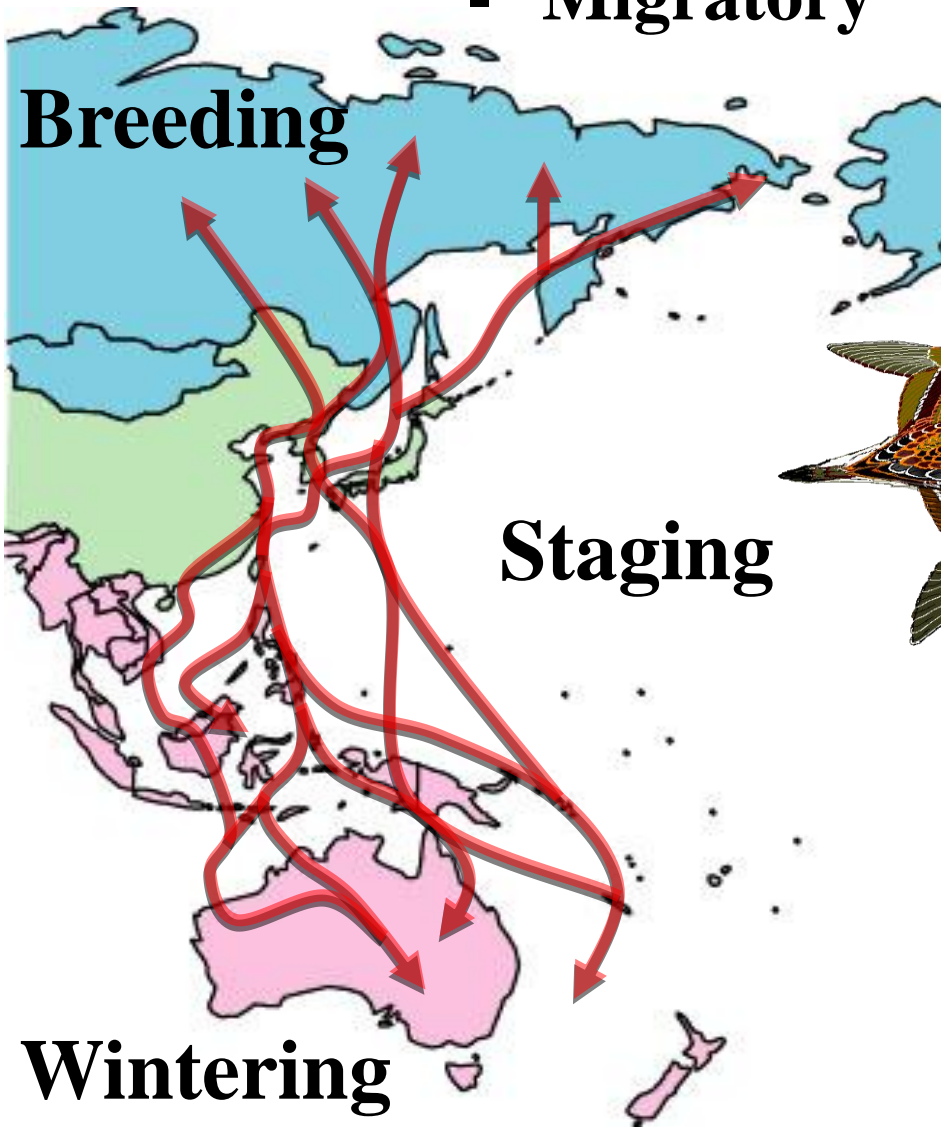
Greenshank



Curlew

What are *Shorebirds* ?

- A group of special birds in wetland
- Migratory birds

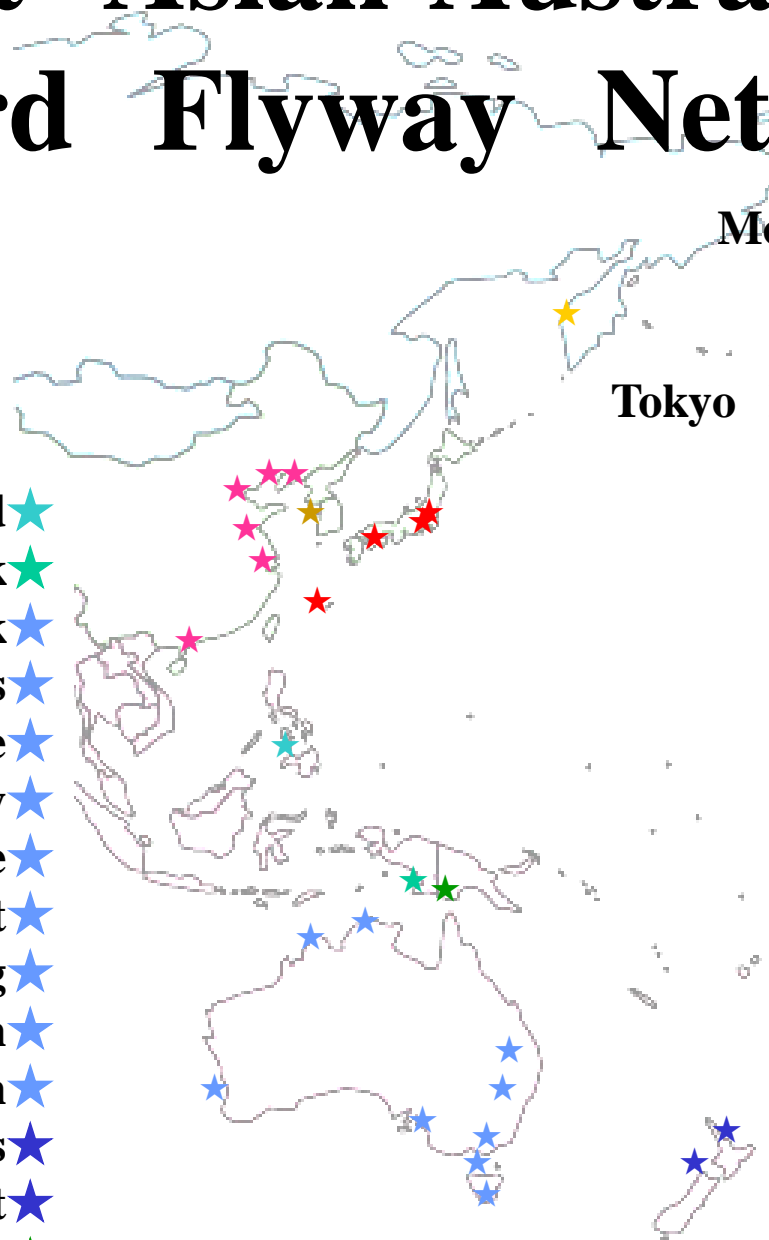


12000 km !



Red-necked stint

The East Asian-Australasian Shorebird Flyway Network



Moroshechnaya Estuary★

Yatsu Tidal Flats★

Tokyo Bay Wild Bird Park★

Yoshino Estuary★

Manko★

Shuangtaizi Estuary★

Yellow River Delta★

Maipo★

Chongmin Dongtan★

Yalu Jiang★

Yancheng★

Olango island★

Wasur National Park★

Kakado National Park★

Parry lagoons★

Thomsons Lake★

Morton Bay★

Kooragang Nature Reserve★

Corner Inlet★

The Coorong★

Orielton lagoon★

Logan Lagoon★

Fifth of Thames★

Farewell Spit★

Tonda Wildlife Area★

Tonggin Estuary★

Teaching Material on Shorebirds for Environmental Education

地球を旅する渡り鳥たち

シギ・チドリ体験学習教材



環境省・WWFジャパン
US Fish and Wildlife Service

-アクティビティ-

シギ・チドリ類を作ろう



対象：小学生～中学生(対象は目安です。生徒の発達段階に応じて実施してください)

目的：

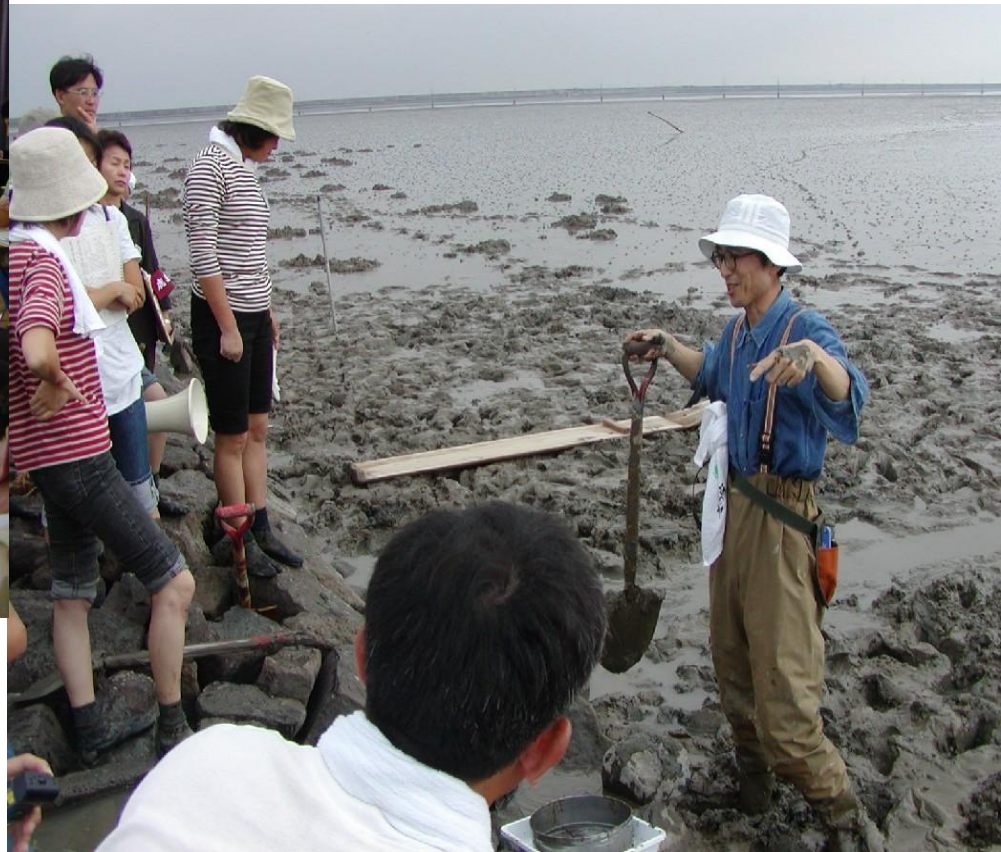
ひとりの生徒を鳥の姿にさせることで、一般的な鳥類に見られる身体上の適応について学びます。次にシギ・チドリ類の姿にさせることで、冬鳥・チドリ類に特有の身体上の適応について学びます。

Demonstration and Workshop



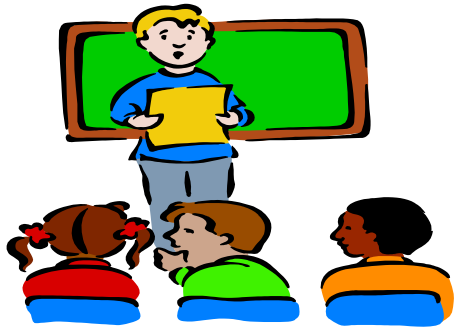
in Okinawa
August 2001

Shorebirds network site training course in Kashima city



Tasks of YNOC for Integrated Wetland Management

1. Environmental Education



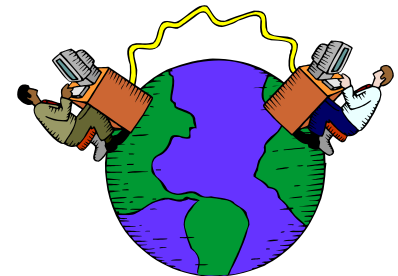
2. Participation of Local people



3. Conservation Research & Monitoring



4. Domestic & International Cooperation



Cooperation & Partnership

