Wetlands in Hokkaido

Kiritappu

Kushiro mire

Sarobetu mire

Bekanbeushi mire

Change in distribution of wetlands in Hokkaido

図 V-2-1 北海道の湿原分布の変化（富士田 1997）

ca. 200,000 ha → ca. 60,000 ha (30 %)

Sarobetsu mire

Mt. Rishiri-Fuji beyond the sea

Kushiro mire from Hosooka observatory

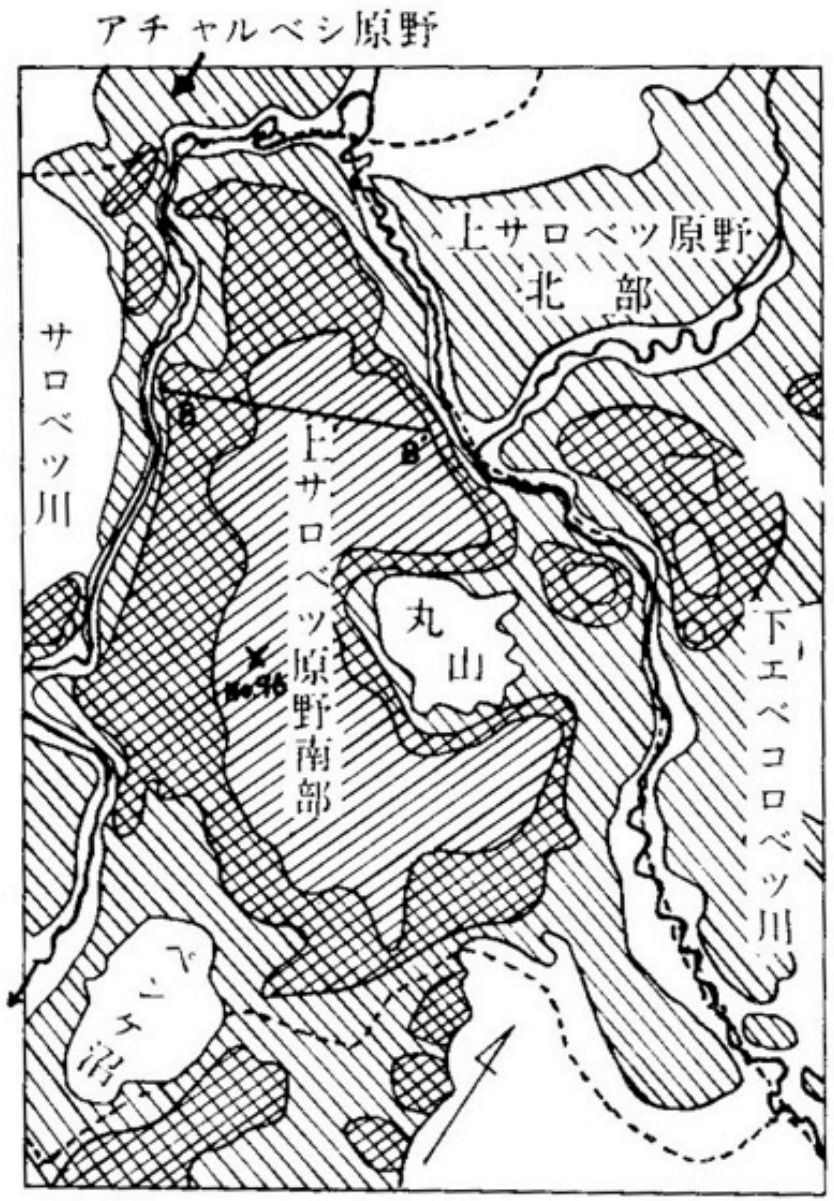
Kiritappu mire from Biwase observatory

Oikamanai mire in Tokachi

Horokayanto mire in Tokachi

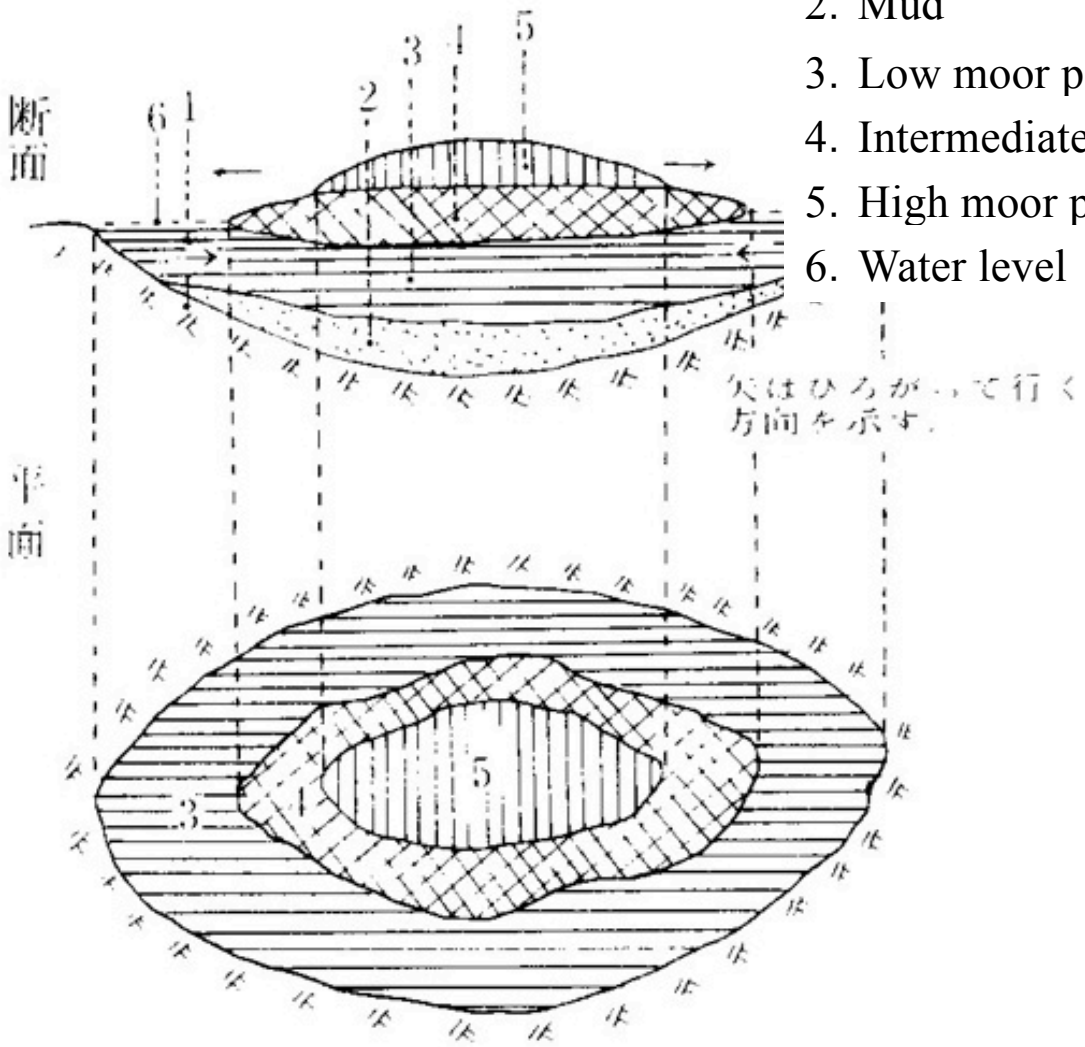
High moor and low moor profiles

（both in grassland）

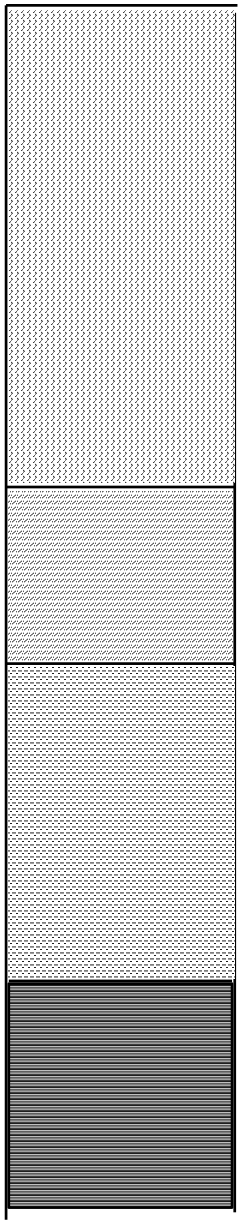


第3図 上サロベツ原野

Distribution of high, intermediate, and low moor in Sarobetsu mire



Formation of peatland



High moor

Sphagnum

Intermediate moor

Moliniopsis japonica, Phragmites, and Myrica gale

Low moor

Phragmites, Alnus

Clay

Peat profile in Bibai wetland

エゾイソツツジ

Ledum palustre
ssp.diversipilosum

ヤチヤナギ　*Myrica gale*

ガンコウラン　*Empetraceae*

ヒメシャクナゲ
Andromeda polifolia

Plants in Sarobetsu mire

ショウジョウバカマとワタスゲ

Heloniopsis orientalis and Eriophorum vaginatum L.

ツルコケモモ *Oxicoccus quadripetalus*
ガンコウラン *Empetrum nigrim var. japonicum*

ヤチヤナギ *Myrica gale*
キスゲ *Hemerocalis flava var. yezoensis*

ワタスゲ *Eriophorum vaginatum L.*

キスゲ *Hemerocalis flava var. yezoensis*

Lowpeat profile in Mukawa

Drying excavated peat for agricultural use

Bibai mire

Bibai mire

Peatland plants

ヤチヤナギ *Myrica gale*

ヤマウルシ *Rhus trichocarpa*

チマキザサ

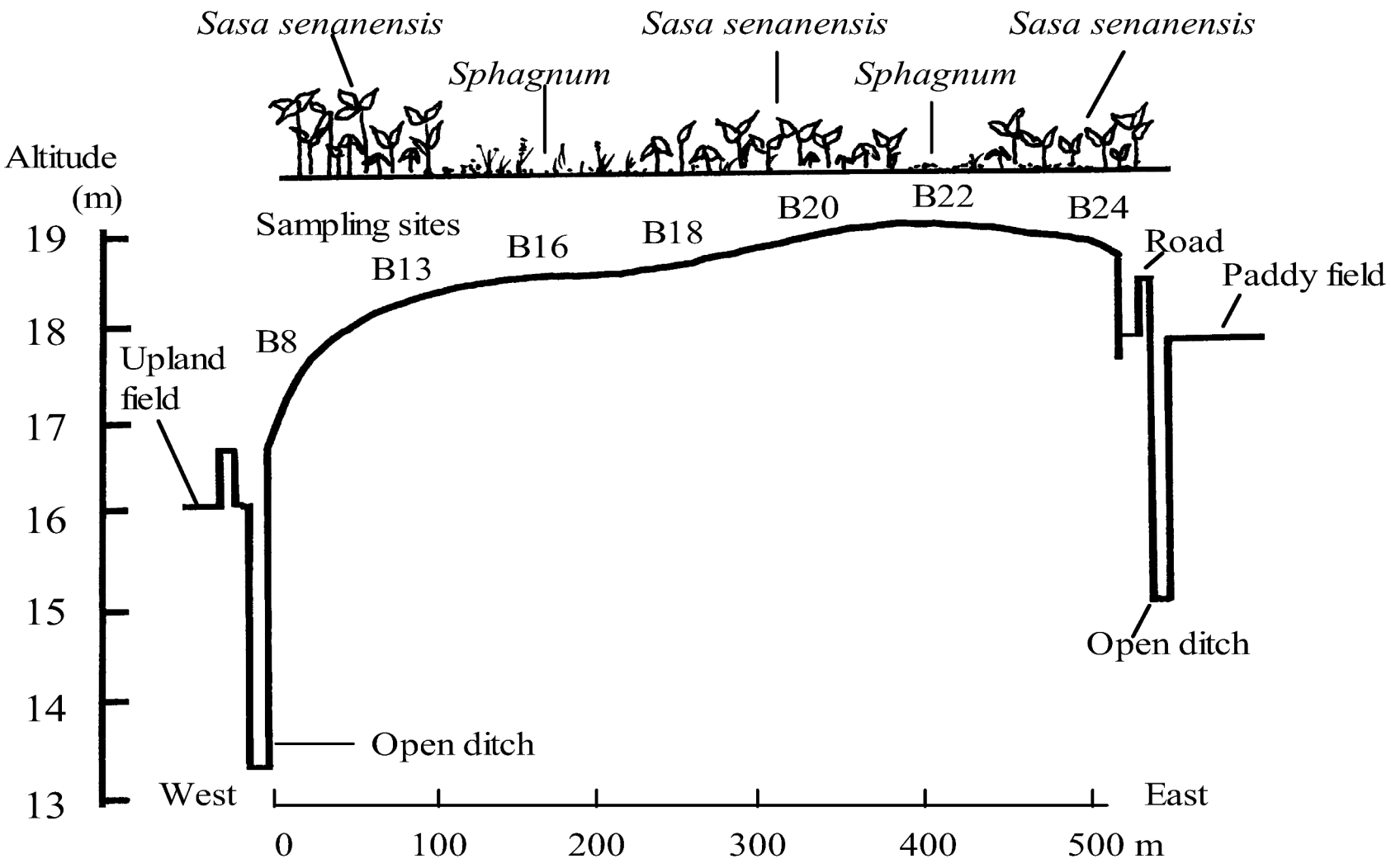
Sasa palmata

スゲ

Carex

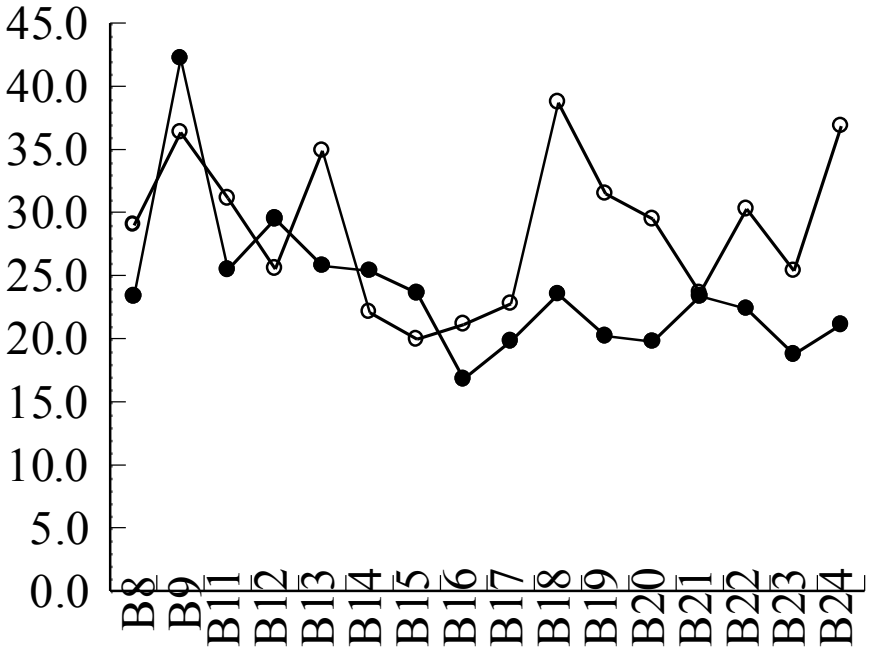
Peatland plants（*Sphagnum*）

Peat profile in Bibai mire（turned to bush due to lowering of ground water level）

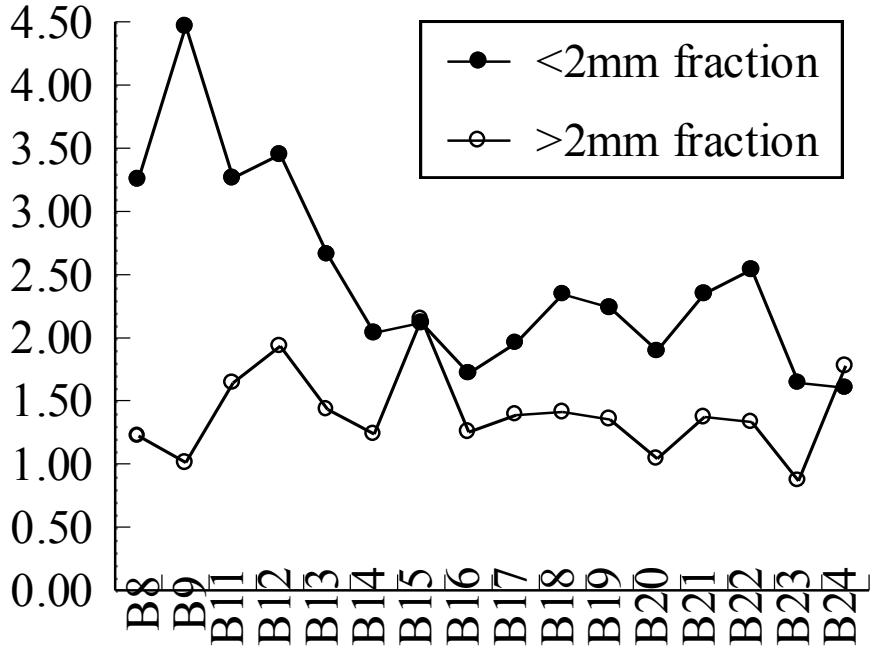


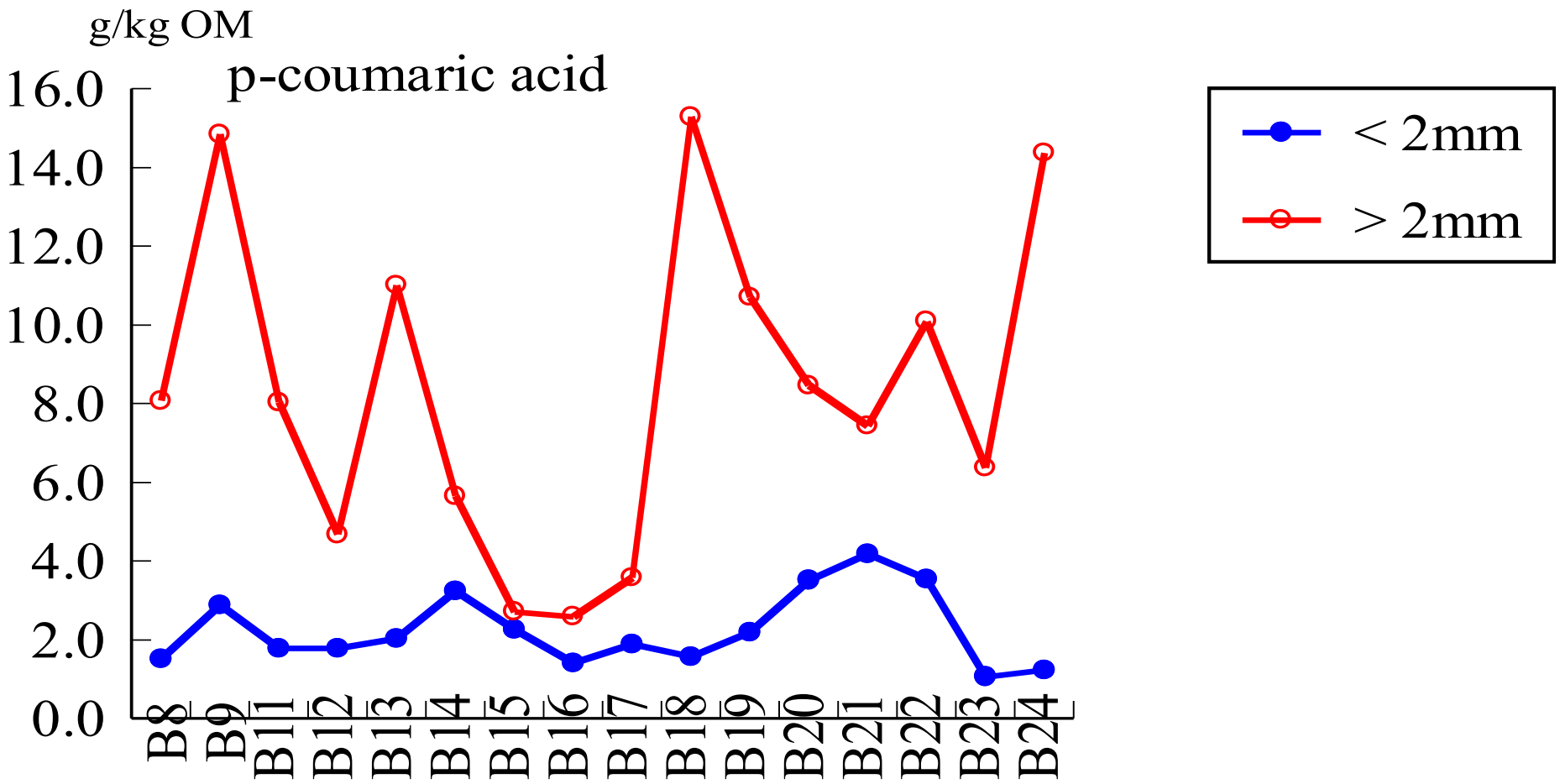
Transect of Bibai mire

Total phenolic acid



Total fatty acid





Yield of p-coumaric acid from peat

Summary

- Volcanic ash in Tokachi records the life of people for more than 20,000 years.
- Hills in Kamikawa area are beautiful, but the agricutlural prctice is difficult due to land shapes and heavy clay soils. Mud flow also damaged the land.
- Major soils in Hokkaido are characterized by three types of special problem soils.
- Wetlands in Hokkaido is a treasure box for wild lifes, but the area is decreasing.