

Asian Wetland Symposium

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Toward Restoration of Ariake Sea
by means of an integrated Studies "CoHHO"
Collaborating with the Social Movement
"The Sea is Longing for the Forest"

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Learning from the 2011 Earthquake/Tsunami



Lessons from the disaster

Necessity to remember reverence to Nature
Recognition of limit of Material Civilization
Nature can't be controlled by our technology

The earthquake and tsunami gave us wetland between forest and sea to reappear clam and eel



Environmental education for children by an oyster fisherman Mr. S. Hatakeyama under "The Sea is Longing for the Forest"



Tree planting festival catch-phrased by
“The Sea is Longing for the Forest” under collaboration
of fishermen and forest people since 1989



CoHHO Studies for Connectivity of Hills, Humans and Oceans established in 2003

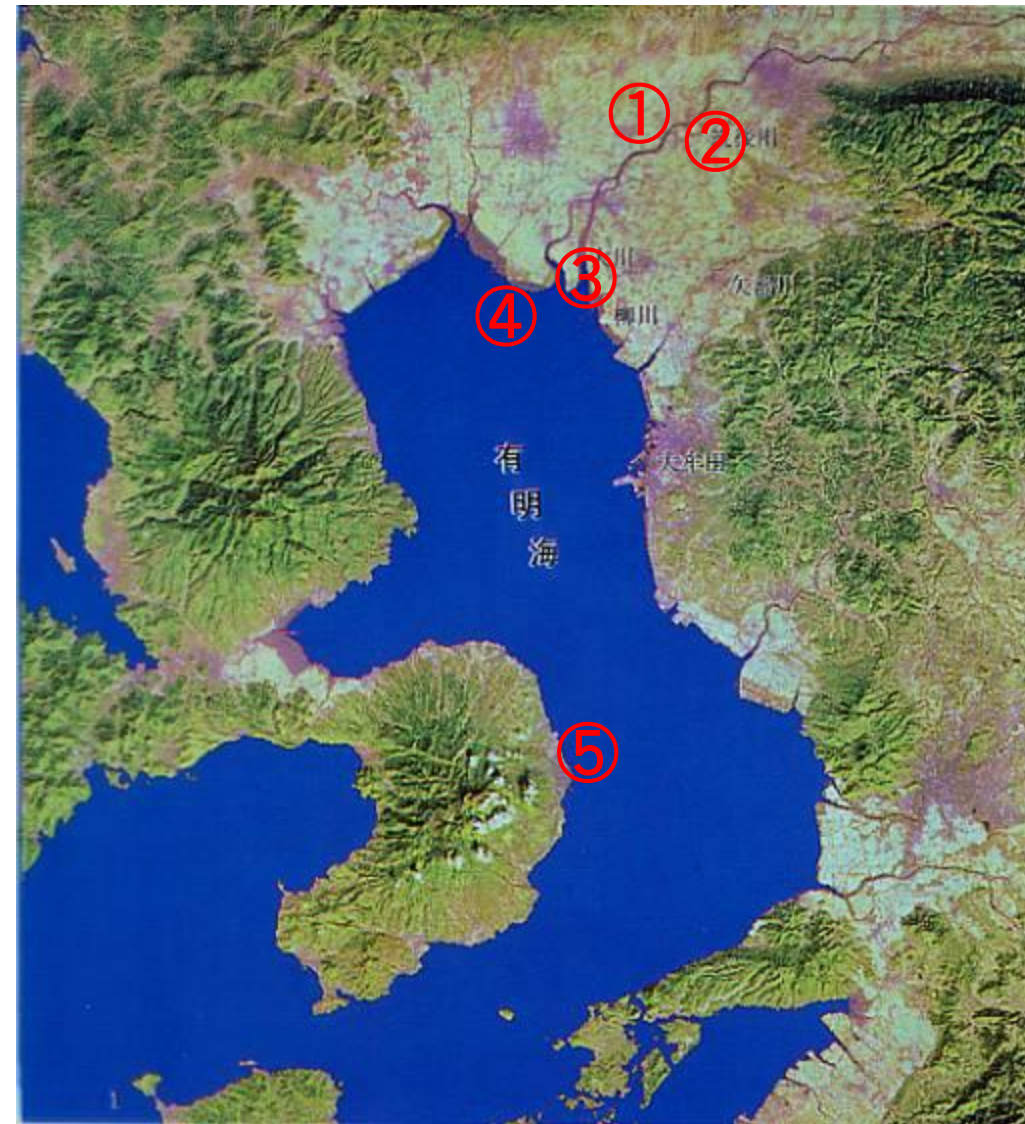
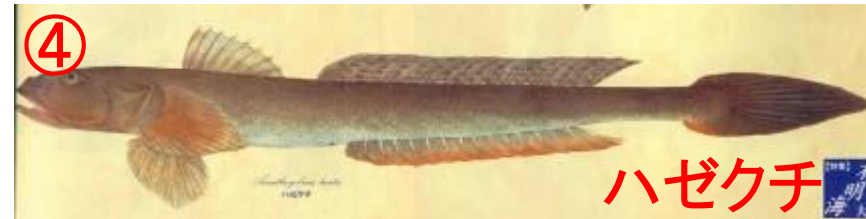


Wide spacial-scale connectivity of forest and ocean in the Northwestern Pacific

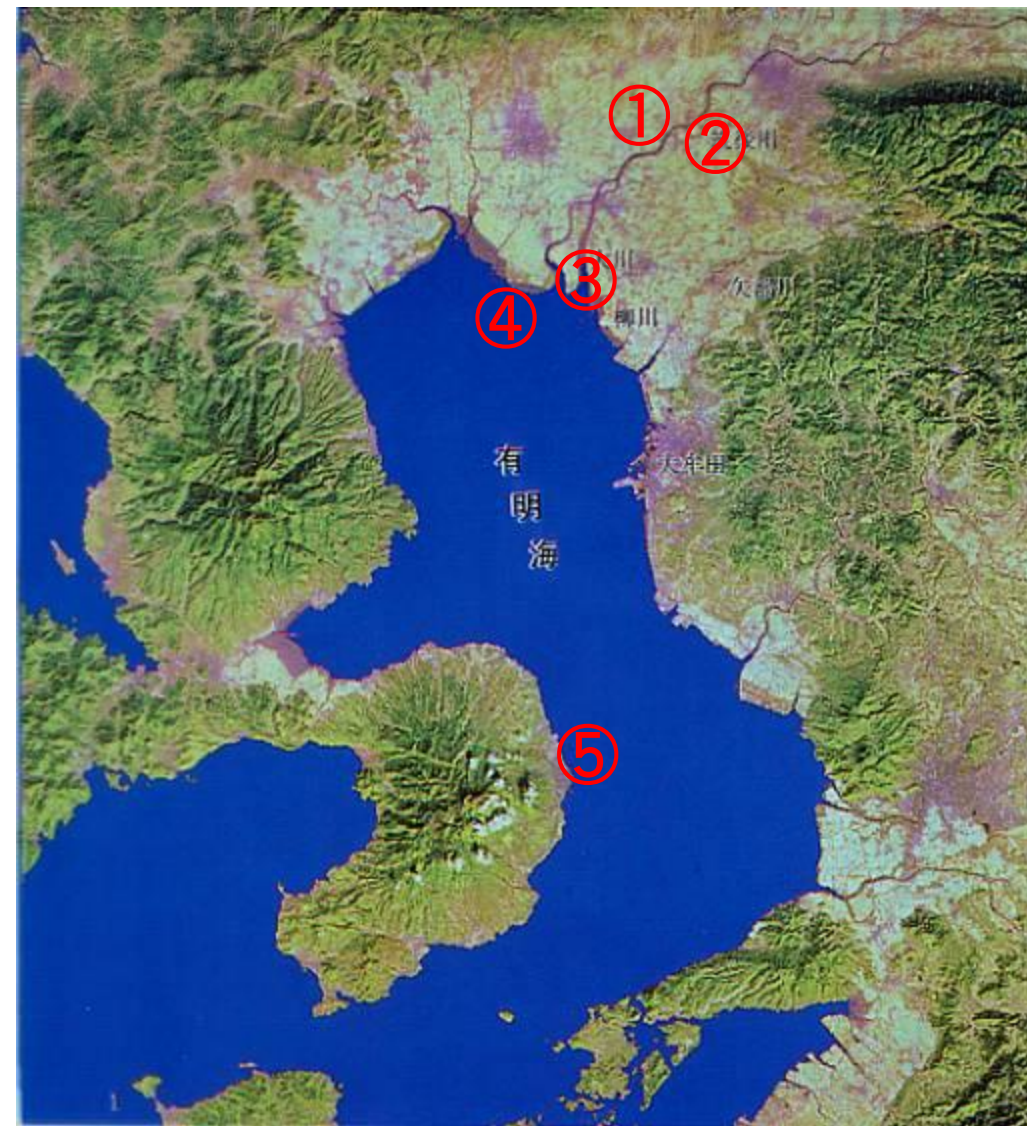


Mongolian-Amur river-Okhotsk Sea-Oyashio

Ariake Sea is typical example of CoHHO world



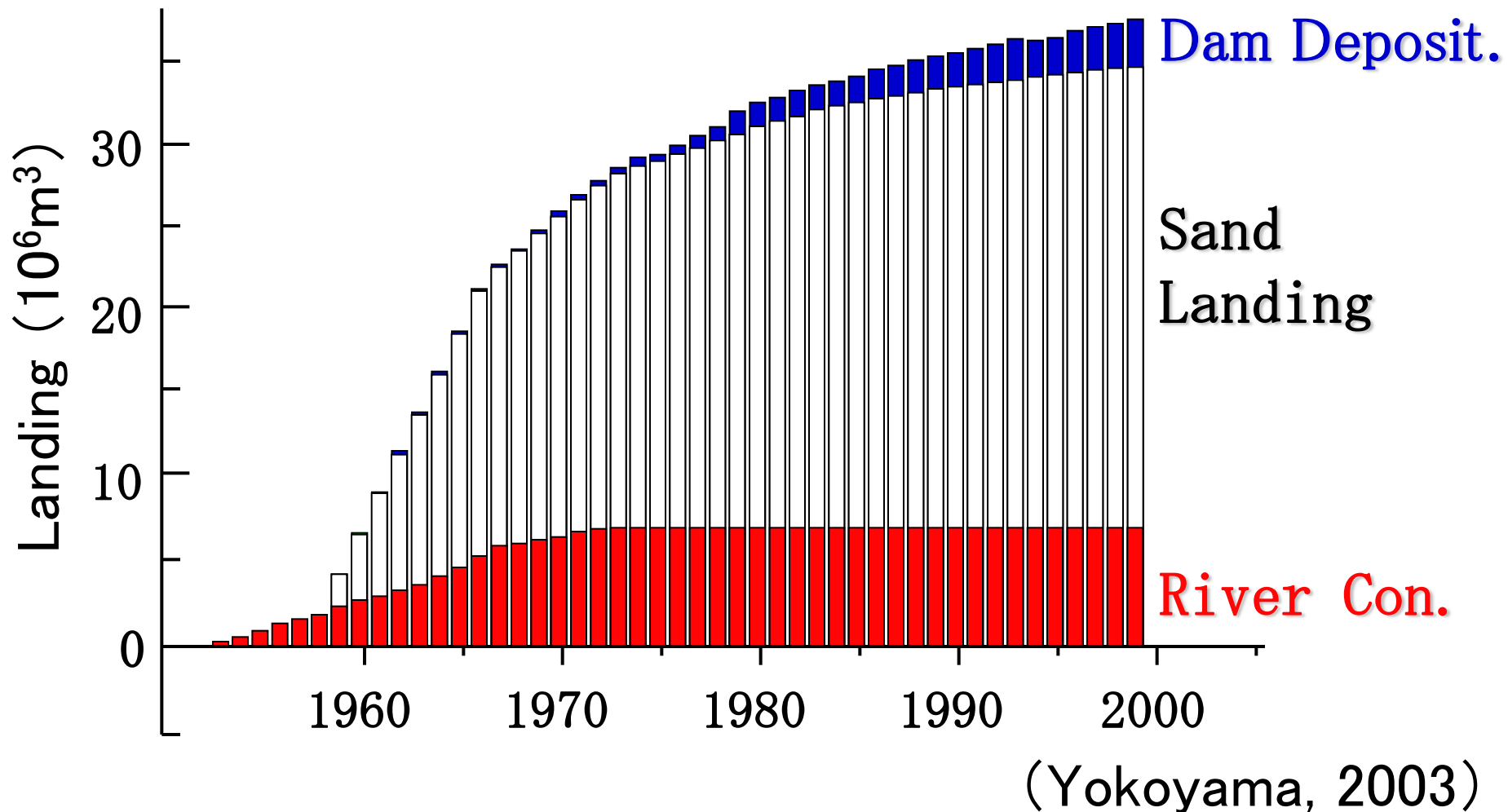
Highest productivity
Highest biodiversity



Chikugo river is a **heart** of Ariake Sea
to produce nutrient-rich detritus



Accumulated Amount of **sand landed** from the Chikugo River in later half of 20th century



Chikugo Ozeki constructed in 1985 to transport **water** for Fukuoka urban area



7km **dyke** construction and **tidal flat** reclamation in the innermost part of Isahaya bay in 1997



Expanded **nori-culture** field in the innermost part of Ariake Sea during winter time



What is the most serious ?

- Landed huge volume of sand from Chikugo R.
- Chikugo Ozeki construction for urban citizens
- Dyke construction and tidal flat reclamation

What is the essential common to those three ?

**Destruction of connectivities between
Forest (land) and Sea by human being**

What we should do for restoration of Ariake Sea ?

Answer is clear

NPO activity for key species Manila clam



国営の諫早湾干拓事業（長崎県）
水門の開門期限から1カ月余り。国
営の干潟が、干潟の回復に努める

諫早開門期限から

有明海



約1500万円の水揚げ
があったという。だが、
「ロチン」と呼ばれた潮
の堤防が海を閉めきった
以降、赤潮が頻繁に発
生してアサリが死滅。5
年前から全く採れなくな
った。干潟は腐った臭い
が漂い、砂地は真っ黒。一
度ドロ化していた」
干潟の再生実験は201
4月に始まり、1年ほ

一人だ。だが、国は開門期
限を守らず、それどころか
長崎地裁が昨年11月に「開
門するな」との仮処分決定
を出して以降、開門問題は
さらに泥沼化。漁場回復へ
の思いは実らぬままだ。
「もう国には頼れない。
今は、この干潟再生に期待
しているんです」
干潟の再生実験は、田中
克・京大名誉教授が代表を

定約。毎

デジタル版に動画

Human connectivity must be the most important key for restoration of nature



**Children had learned so lot from the nature
disappeared children playing in nature from Japan**



How to revive children playing in nature : **endangered species** Japanese eel



Release and recapture experiments under collaboration of **students and children**



50-years are needed for natur restroration

- 1989 The social movement [The Sea is longing for the forest] started by oyster-culture fishermen
- 2003 Integraed Studies[CoHHO] was ploposed
- 2014 [Connecing and supporting Forest-Sato-River-Sea] project
propoeed by the Ministry of Environment

What we could do during the coming 10 to 20 years

Revived wild oriental stork took 50 years

