

# エコシステム

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## 生きている海岸線

- ほうじょう  
| 豊饒の海辺
- | 多様な自然の海岸
- | コンクリートに覆われた海辺
- | 沿岸での自然再生
- † 「生きている海岸線」を取り戻そう

コンクリートで固められた海岸線とは対象に、エコトーンがあり、さまざまな生きものがくらす海岸線…。生きている海岸線は命を守り、経済と社会の発展になくはならないものです。Natural coastlines are living seashores sometimes called 'ecotones'. They contain a variety of living things and are the direct opposite of 'dead' coastlines made of concrete sea-walls. These shorelines give us a variety of benefits.

## Living Seashores

Along a seashore where the land transitions to the sea, a variety of plants and animals thrive, CO2 is stored, water is cleansed, and impacts of tsunamis and high-tides are mitigated. These areas are where we harvest rich marine resources and enjoy tourism and recreation.

Japanese archipelagos have long coastlines. Total length of Japan's coasts is 35,000 kilometers which is longer than those of the United States and Australia. They are classified into five categories: 1) Rock seashores, 2) Sand beaches, 3) Tidal mud-flats, 4) Seaweed beds, and 5) Coral reefs.

Even though these coastal areas give us abundant benefits, in Japan, many if not most of these rich seashores have been destroyed and converted into many forms of concrete structures in the name of protecting seashores from natural disasters, or they have been changed to farmlands, industrial sites or recreational lands.

Only 53% of natural seashores remain in all Japanese islands. (only 42% in the main islands if you omit small islands). Moreover, large urban areas such as Tokyo and Osaka have only 10-20% of their natural shorelines left. It is ironic that few people realize that those concrete structures will, sooner or later, become useless having turned into huge blocks of solid waste.

In the estuary of the River Severn in Southern England, its delta areas were once converted to farmlands. But people there have suffered from higher tides and

sea level rise due to climate change. They have chosen to restore the areas facing the sea instead of enhancing the existing sea-walls; and, they have moved the remaining farmlands farther inland.

In Jamaica Bay in New York City, all levels of governments have worked together to promote restoration of salt-marsh wetlands to protect its biodiversity and to contribute to mitigation of climate change. They use those wetlands as natural breakwaters to protect people and their properties in beach areas of the bay from natural disasters.

Imagine a vast tidal basin where people enjoy clamming alongside groups of shorebirds. Or imagine a sandy beach where lovers watch a beautiful sunset. Think about our island country's beaches that meet with seas where indispensable cultures have been built. Those are now lost memories in many places.

Let us remove the concrete structures, recover ecotone areas, and regain 'Living Seashores' where abundant wildlife lives.



Seashore areas, between land and sea, give us many diverse benefits



There are five types of seashores but Rocky coast is the most common in Japan



During the boom period of economic development, most of the seashores were converted to concrete structures



On the Steart Peninsula of England, farmlands have been moved inland by 1 kilometer and coastal areas have reverted to wetlands