

3RD
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SCIENCE
CONFERENCE

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Marine mammals and fish species conservation in the Yellow Sea

Jilong LI

Professor

Chinese Academy of Fishery Sciences



Main Scenarios

- 1. Eco Characteristics of the sea*
- 2. Institutional Structure for Conservation*
- 3. Legal system Provided for Conservation*
- 4. Main efforts Have Been Made*
- 5. Challenges Faced*

1. Characteristics of Marine mammals and fish species

1.1 Fishes and Its Ecological structure

Total of 250 species of fish, not including shrimps, jellyfishes, algae.

Main economic species are small yellow croaker, cod, anchovy, pacific shad and etc,

From the perspective of the catches, the ecological structure of YS :

fish 67.0% ,

crustacea 17.2%

mollusks (molludcs and cephalopodas) 12.3%

algae 0.2%

other 3.3%

Proportion of ecological species in the total Marine catch (%) of China

Period	Fish	Shrimp/crab	mollusks	Algae	others
1950~1959	68.00	17.54	9.52	1.02	0.00
1960~1969	71.57	11.93	5.10	2.41	0.00
1970~1979	74.01	12.36	6.28	5.59	0.00
1980~1989	73.23	15.76	10.11	0.09	0.81
1990~1999	69.87	16.16	10.42	0.14	3.42
2000~2004	67.03	17.21	12.25	0.20	3.31

1. Characteristics of Marine mammals and fish species

1.2 Main Marine mammals

Harbor seal/Spotted Seal (*Phoca largh*)

In September 1992, Dalian established the only nature reserve in China to protect the pacific harbor seals on the coast of the Bohai sea. In 1997, it was approved by the state council of China as a national nature reserve.

The reserve is located in the western coast sea area Dalian, a total area of 909,000 hectares with more than 70 islands. There are about 1,000 western pacific harbor seals found in this area.

Cowfish/ Finless porpoise (*Neophocaena phocaenoides*)

Cowfish are widely distributed in tropical to temperate waters such as the western Pacific Ocean, Indian Ocean, sea of Japan and Chinese coast. It is found in Bohai sea, yellow sea, east China sea, south China sea, and can even be traced back to the Yangtze river



1. Characteristics of Marine mammals and fish species

1.2 Main Marine mammals

Gray whale (*Eschrichtius robustus*)

Gray whales are distributed in the north Pacific, north Atlantic, north American coast, sea of Okhotsk, Bering sea, sea of Japan and the yellow sea, east China sea, south China sea and other temperate waters around.

Other rare and endangered species, Such as Lancelet(*amphioxus*)

1.3 Importance of Marine mammals and fishes

1

Supply aquatic products and proteins

2

Provide and maintain biodiversity

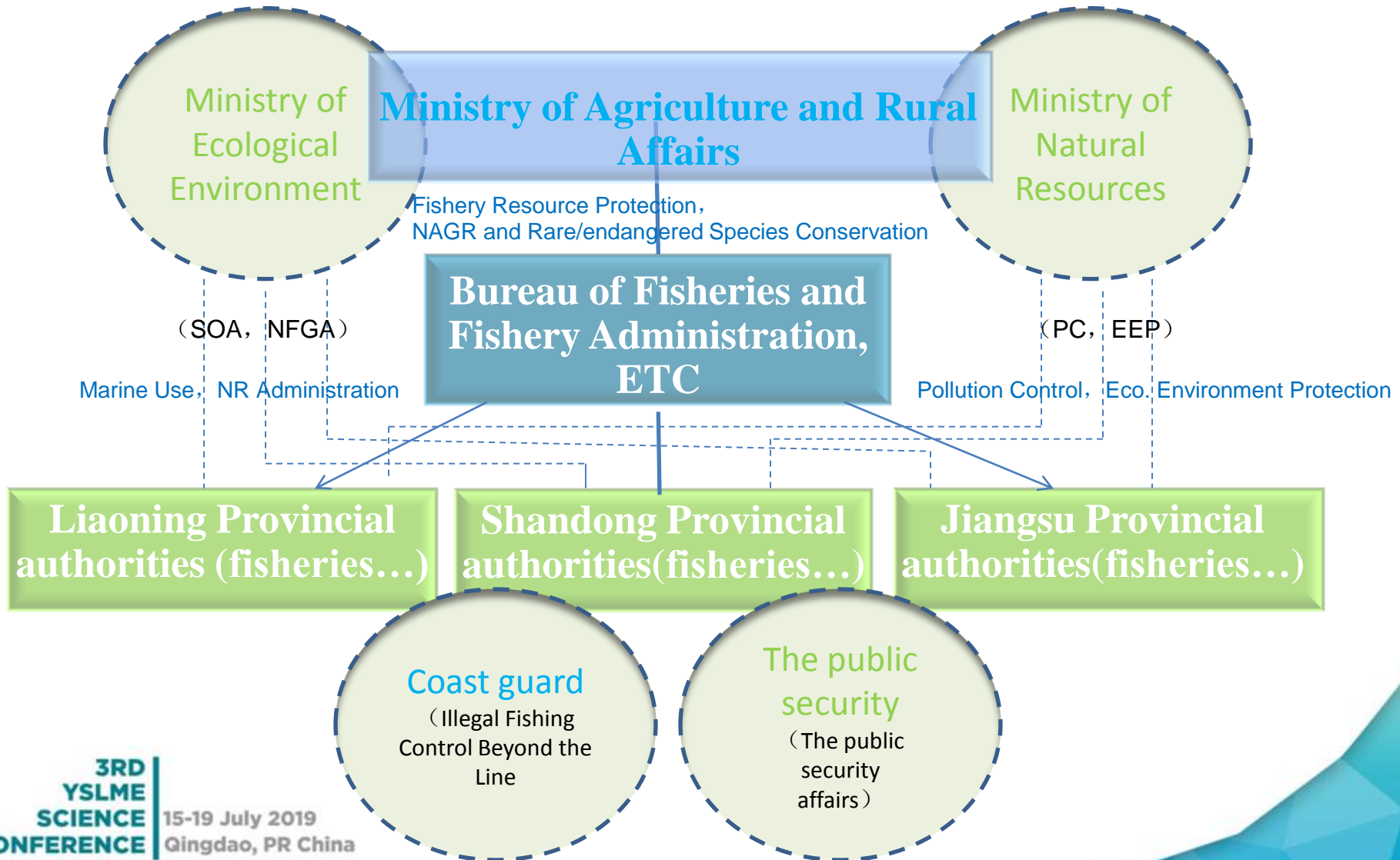
3

Improve ecological environment

4

Maintain the balance of nature

2. Administrative Institutional Structure for Conservation



3. Legal system Provided

3.1 Laws and Regulations :

The fisheries law , promulgated in 1986 and amended in 2013.

The law of environmental protection , promulgated in 1982.

The wildlife protection law, promulgated in 1988.

The law of the use of sea areas, promulgated in 2002.

The law of the territorial sea and the contiguous zone , promulgated in 1992.

The law of the exclusive economic zone and continental shelf, promulgated in 1991 .

China ratified the convention on biological diversity in 1992.

China has acceded to the United Nations convention on the law of the sea (UNCLOS), which came into force in 1994, and ratified the (UNCLOS) in 1996.

Control of
Resource
Utilization

Resource
and Habitat
Protection

Rare and
Endangered
Specie
Conservation

Regulated

3. Legal system Provided

3.2 Key normative documents : Action Plan for Aquatic Living Resources Conservation (2006)

0007962

国务院文件

Draft by MOA with other sectors

Fishery resources protection and restoration

Conservation of biodiversity and endangered species

Ecosystem Protection and restoration

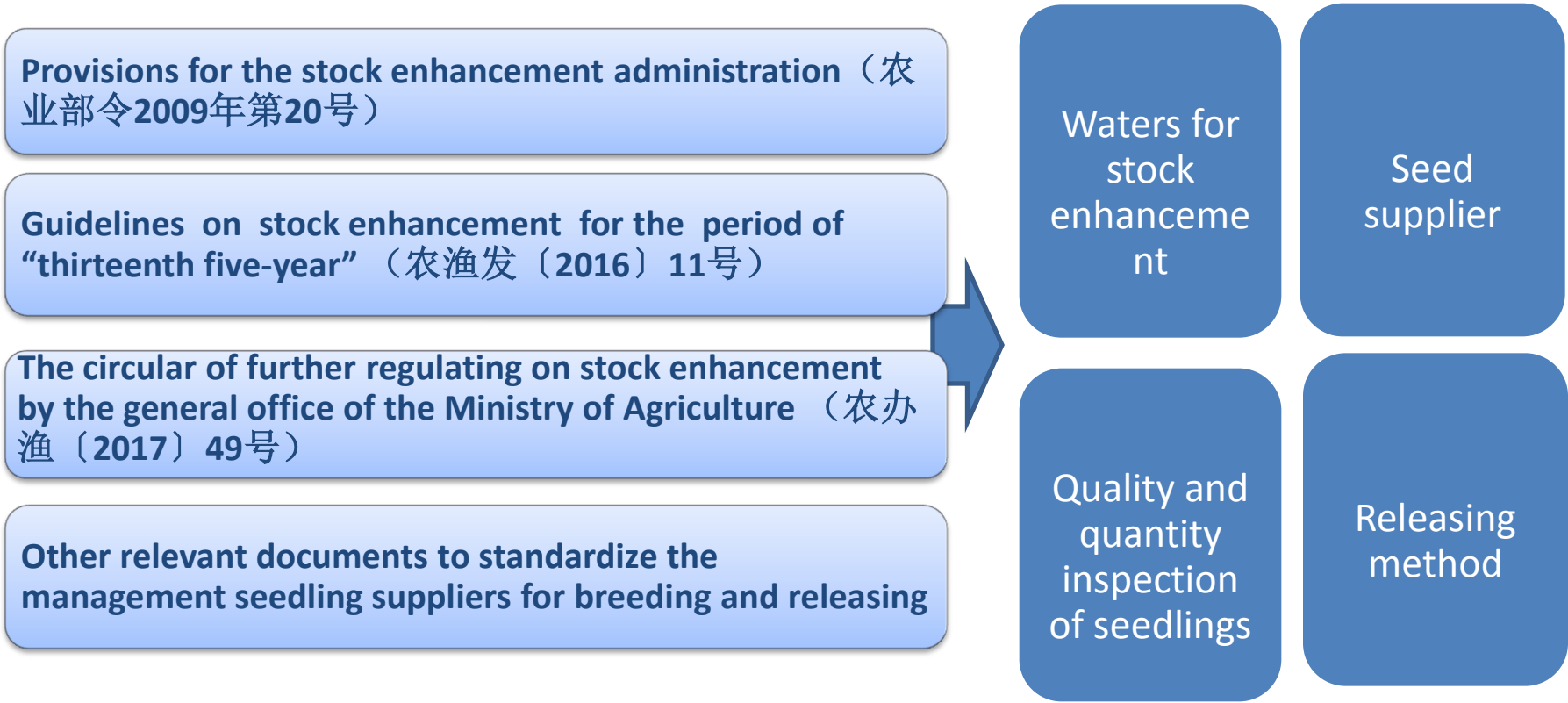
- Responsible fishing management
- Protection of fishery resources
- Stock enhancement

- AGRR & Nature reserves
- Endangered species rescue
- Endangered species breeding
- Alien species supervision

- Prevent water pollution and disaster control
- Resources and ecological compensation
- Ecological environment restoration

3. Legal system Provided

3.3 Administrative Regulations for Stock Enhancement



3. Legal system Provided

3.4 Administrative Regulations for Fishing ban and closed fishing season

Fishing gear, starting and ending time for each years; Started from 2003, reviewed for many times

3.5 Administrative Regulations for National Aquatic Germplasm Resource Reserves

Catching, transportation, trading, habitat protection (pollution, occupying)

3.6 Administrative Regulations for Protection of endangered aquatic wildlife

Catching, transportation, trading, habitat protection (pollution, occupying)

3.7 Administrative Regulations for Fishing gear and methods control

Gears, Fishing methods, mesh size

3.8 Administrative Regulations for Fishing efforts control (vessel number and power)

Fishing vessel and the power motored

4. Main efforts Have Been Made

•4.1 Fishing ban and closed fishing season

禁渔区：机轮拖网禁渔区

禁渔期：北纬35度以北的渤海和黄海海域为5月1日12时至9月1日12时 for 2018 and 2019。

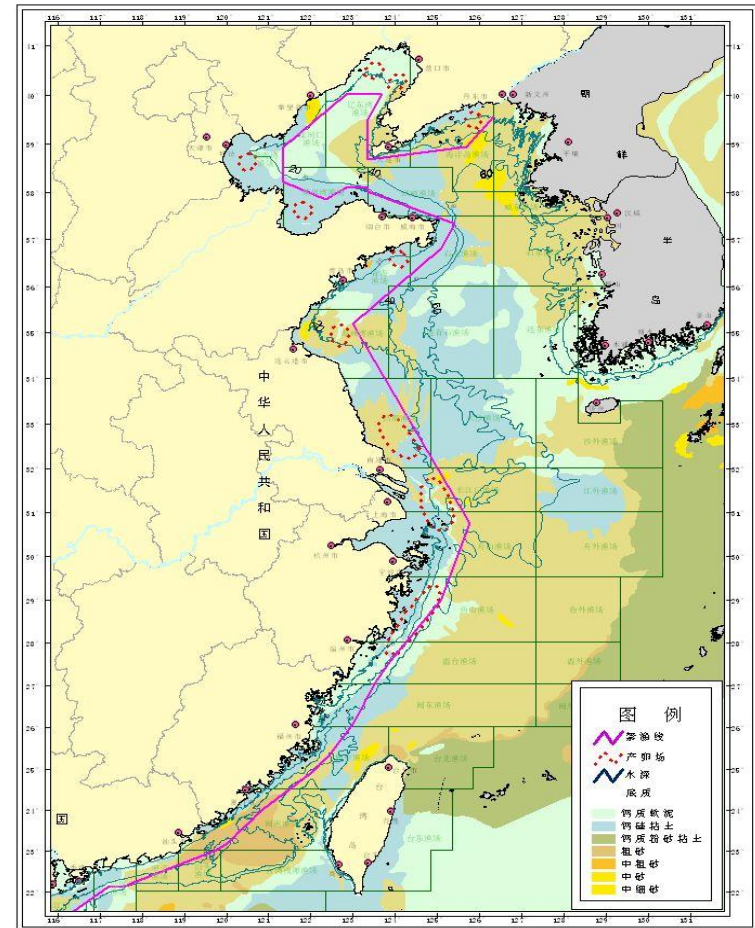
• 4.2 Fishing gear and methods control

自2015年1月1日起，规定了十三种渔具的适用海域范围和主捕品种，包括拖网等八大类60种渔具的最小网目尺寸。

•4.3 Fishing efforts control (vessel number and power)

继续实施海洋捕捞渔船减船转产，2018年全国压减渔船不少于4000艘、功率不低于30万千瓦。

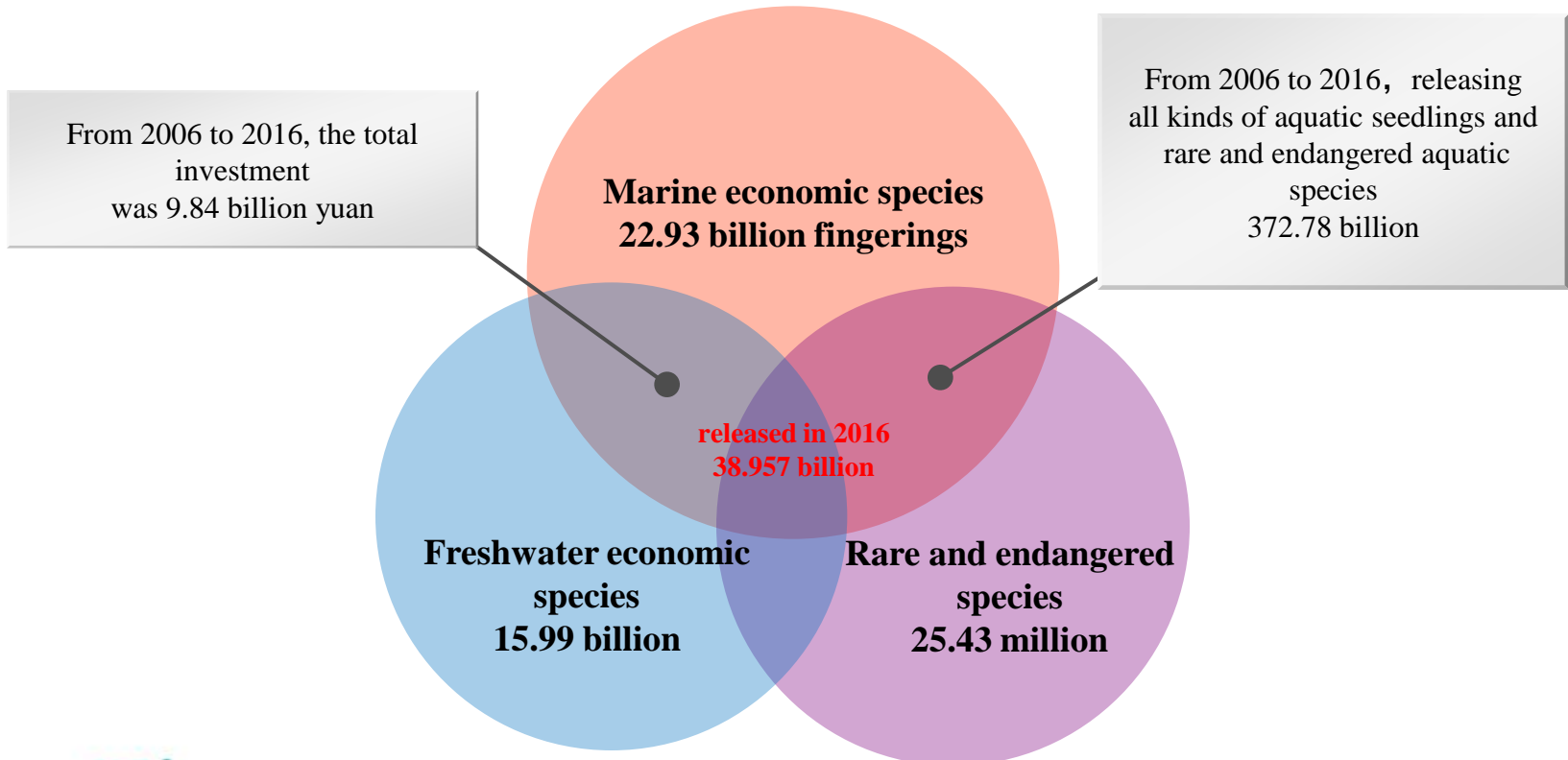
90年代小黄鱼 (*larimichthys polyatis*)产卵场



4. Main efforts Have Been Made

4.4 Stock enhancement and releasing

Chinese prawn, Flounder fishes, bream,
Squid(*Sepia esculenta*), ...

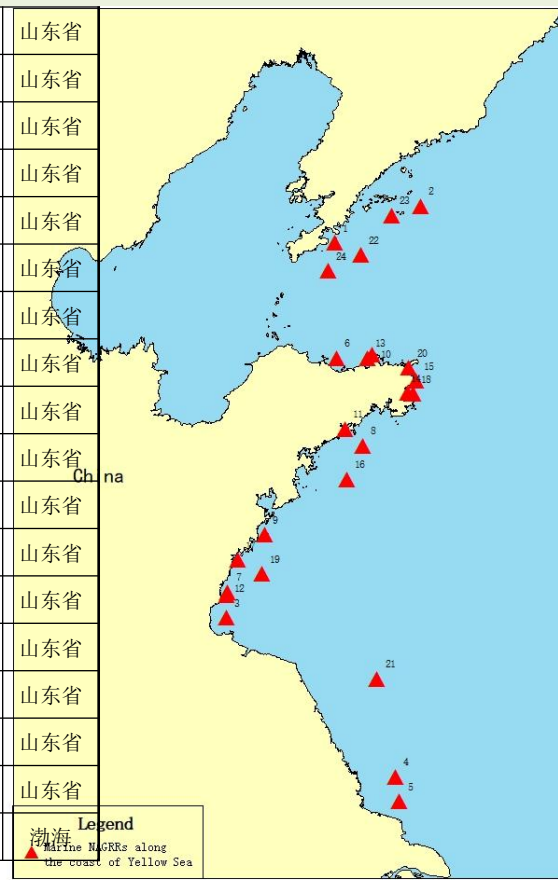


4. Main efforts Have Been Made

•4.5 National Aquatic Germplasm Resource Reserves

37 Reserves in Bohai and Yellow Sea,
List 34 targeted species, including 12 species of fish, 12 molluscs, 4 crustacea, 2 cephalopoda, 3 aquatic plant and 3 others.

序号	保护区名称	所在地区	序号	保护区名称	所在地区
			20	灵山岛皱纹盘鲍刺参国家级水产种质资源保护区	山东省
1	秦皇岛海域国家级水产种质资源保护区	河北省	21	靖子湾国家级水产种质资源保护区	山东省
2	昌黎海域国家级水产种质资源保护区	河北省	22	乳山湾国家级种质资源保护区	山东省
3	南戴河海域国家级水产种质资源保护区	河北省	23	前三岛海域国家级水产种质资源保护区	山东省
4	山海关海域国家级水产种质资源保护区	河北省	24	小石岛刺参国家级水产种质资源保护区	山东省
5	三山岛海域国家级水产种质资源保护区	辽宁省	25	桑沟湾国家级水产种质资源保护区	山东省
6	海洋岛国家级水产种质资源保护区	辽宁省	26	荣成湾国家级水产种质资源保护区	山东省
7	大连圆岛海域国家级水产种质资源保护区	辽宁省	27	套尔河口海域国家级水产种质资源保护区	山东省
8	大连獐子岛海域国家级水产种质资源保护区	辽宁省	28	千里岩海域国家级水产种质资源保护区	山东省
9	海州湾中国对虾国家级水产种质资源保护区	江苏省	29	日照海域西施舌国家级水产种质资源保护区	山东省
10	如东大竹蛭西施舌国家级水产种质资源保护区	江苏省	30	广饶海域竹蛭国家级水产种质资源保护区	山东省
11	蒋家沙竹根沙泥螺文蛤国家级水产种质资源保护区	江苏省	31	黄河口文蛤国家级水产种质资源保护区	山东省
12	崆峒列岛刺参国家级水产种质资源保护区	山东省	32	长岛许氏平鲷国家级水产种质资源保护区	山东省
13	长岛皱纹盘鲍光棘球海胆国家级水产种质资源保护区	山东省	33	荣成楮岛藻类国家级水产种质资源保护区	山东省
14	海州湾大竹蛭国家级水产种质资源保护区	山东省	34	日照中国对虾国家级水产种质资源保护区	山东省
15	莱州湾单环刺螠近江牡蛎国家级水产种质资源保护区	山东省	35	无棣中国毛虾国家级水产种质资源保护区	山东省
16	靖海湾松江鲈鱼国家级水产种质资源保护区	山东省	36	月湖长蛸国家级水产种质资源保护区	山东省
17	马颊河文蛤国家级水产种质资源保护区	山东省	37	辽东湾渤海湾莱州湾国家级水产种质资源保护区	山东省
18	蓬莱牙鲆黄盖鲽国家级水产种质资源保护区	山东省			
19	黄河口半滑舌鲷国家级水产种质资源保护区	山东省			



3. Main efforts Have Been Made

- Harbor seal conservation action plan (2017–2026)

Animals under the state’s second class of the key protected wild animals

Fishery administrations in Hebei, Liaoning and Shandong provinces

Relevant scientific research institutions and administrative ins. of aquatic wildlife nature reserves


According to statistics, the number of wild spotted seals worldwide is about 450,000

Chinese waters is about 8,000.


In 1980s, the lowest number about 1,200,

In 2006 and 2007 were about 2,000.


Main Actions



Ex situ
Conservation



Artificial breeding
and releasing

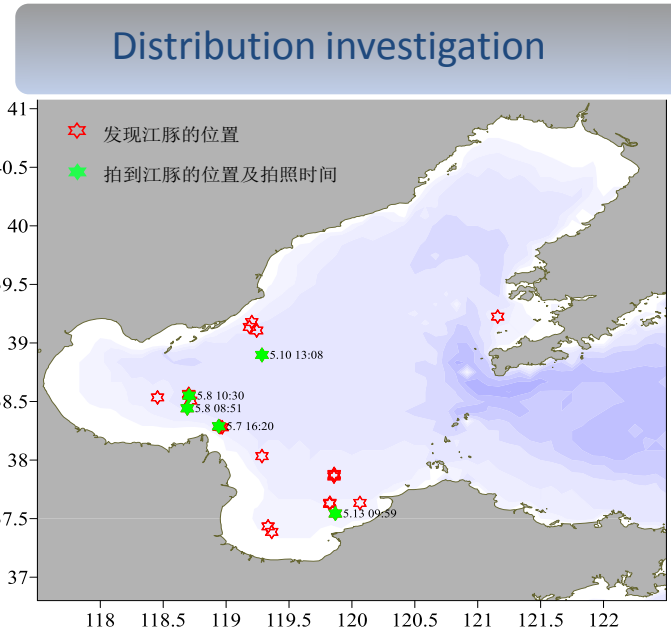


Habitats
restoration

4. Main efforts Have Been Made

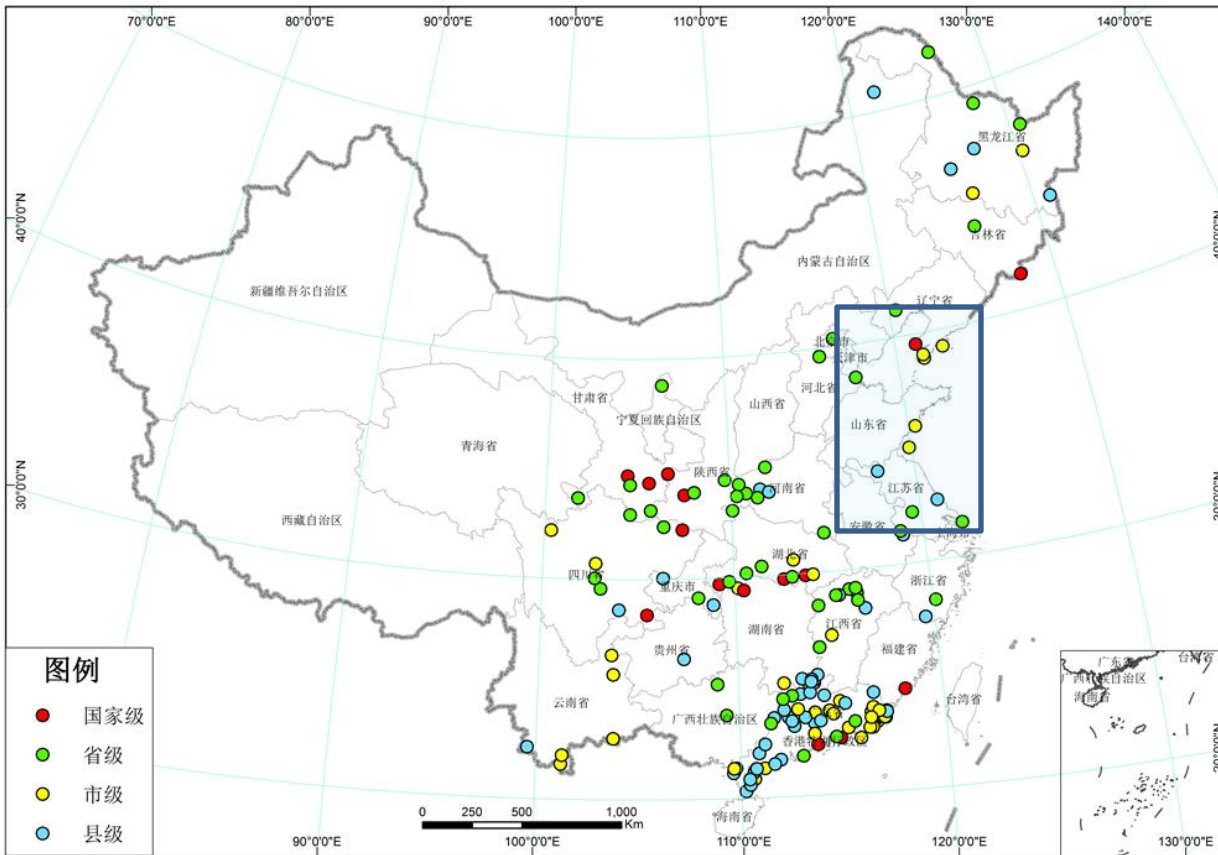
- Cowfish/ Finless porpoise (*Neophocaena phocaenoides*) Monitoring

The “Chinese Fishery Science 102” vessel executed “Yellow Sea and Bohai Sea Cowfish population, distribution and migration investigation in 2018.”



4. Main efforts Have Been Made

•Reserves for Protection of Endangered Aquatic Wildlife



Not just:

省份	保护区名称
辽宁	朝阳小凌河中华鳖省级自然保护区
上海	上海市长江口中华鲟自然保护区
江苏	江苏镇江长江豚类省级自然保护区
	江苏南京长江江豚省级自然保护区

辽宁	大连斑海豹国家级自然保护区
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Mainly to protect, lancelet and harbor seal, cowfish

Natural Aquatic Endangerer Species Reserves in the Yellow Sea

5. Challenges Faced Now and May in the Future

However, mammals and fish species conservation in the Yellow Sea, Challenges are still existed:

➤ Water pollution leads to the deterioration of water quality

➤ Human activities have led to the destruction of habitats

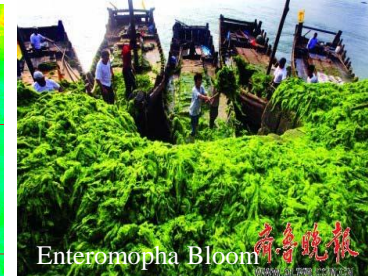
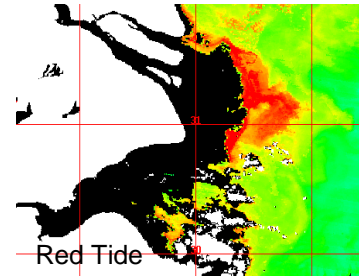
➤ Overfishing has caused a serious decline in fishery resources

➤ Global warming

And sometime/always-

➤ Illegal fishing

Harmful Algae Bloom



Conclusion:

**Marine mammals and fish species
conservation in the Yellow Sea
*is always to be on their way...***

谢谢!

**Thank You for Your
Attention!**