

## EDITORIAL 主编寄语

时间 2011年9月4日 地点 河北省秦皇岛市 拍摄 俞孔坚

位于秦皇岛滨海湿地的鸟类保护区是一处重要的候鸟栖息地。2008年之前,这里的 浅海区域被滥用:垃圾遍布,污水由河流排入,雨水径流携带污染物汇入大海,海岸带 富营养化严重……后来,通过清除建筑垃圾,沿海岸带营造"海绵"绿地来截留地表雨 水,修复滨海盐沼湿地,科学划定保护区范围,鸟类栖息地的环境得到了极大改善。随 着鸟类数量显著增加,如今这里已成为一处观鸟胜地。

Date September 4, 2011 Location Qinhuangdao City, Hebei Province Photographer Kongjian Yu

The protected coastal wetland in Qinhuangdao is an important habitat for migratory birds. Before 2008, the area's neritic zones here were abused for development. They were covered with rubbish, sewage, and polluted rainwater. The coastline was experiencing serious eutrophication. Through the removal of waste, the construction of "sponge" greenbelt along the coast to prevent polluted surface rainwater from entering the ocean, the restoration of coastal salt marsh wetland, and the replanning of the protected area, this bird habitat has been repaired. As the number of birds using the area has increased, it has become an increasingly popular place for bird watching.

## 海岸带景观

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海岸线(带)是最清晰而又最不确定的景观。据《圣经·旧约》记载,上帝在创造了昼夜、空气之后,在第三天创造了海洋和陆地的分界线:

"神说,天下的水要聚在一处,使旱地露出来。事就这样成了。"

于是,世界就一分为二,水聚为海,旱地为陆。在中国的五行中,水、土被认为是完全对立和相克的两种元素。因此,当两者在空间上相遇时,一条清晰的边界产生了——这便是海岸线。每一条海岸线在世界地图上都清晰可辨;且对许多生命来说,这条线更是明确的生命底线,跨越它,便意味着死亡。

很久以前,我就有一个梦想——沿海岸线徒步行走,一只脚踏在水里,另一只脚踏在陆上,就这样走遍祖国的海岸线。渐渐地我发现,这个梦想太遥远。因为在现实中,海岸线是随潮涨潮落而变化的,正如人不能两次踏进同一条河流,人也不可能两次踏上同一条海陆分界线。我们在地图上看到的海岸线,在现实中却是一条难以界定的海陆过渡带——一条非确定的线。如果从学术定义来认识这条带,其宽度可达几公里,甚至上百公里不等。

海岸线(带)的不确定性还体现在其处在海洋与陆地之间不间断的、此消彼长的变幻之中:海水的侵蚀和搬运带来岸线的流变;火山爆发带来的熔浆塑造出新的岸线;黄河入海口每年都向海洋延伸数公里;地震和海啸会瞬间摧毁防波堤,将陆地与海水的边界重新划定……这些都使得海岸线更加变幻莫测。古人用"沧海桑田"一词来描绘这种变化,可谓再生动不过!

海岸线(带)是地球上一条虽丰富多样但也异常脆弱的景观带。这里是海陆两种元素交融"相生",而非"相克"的交错带,其处于一种精妙的平衡状态中。这种交错和平衡体现在水量、盐分和营养物浓度有规律的变化之中,以及海陆之间空气的流通、温度的变化和降雨量的分布之中。因而产生了与之相适应的独特而丰富的生物群落:在潮间带繁衍生长的红树林;随潮水涨落而迁移的贝类生物和鱼类;在陆地产卵、海里生活的海龟;以及在海陆之间穿行的海鸟。正如海龟会在相同的繁殖季爬上同一海岸来产卵,也会因为微妙的水温和夜光的差异调整其上岸的时间,海陆之间这些看似变化莫测的状态,实际上处于一种以千万年为计量单位的动态的平衡之中,其微妙程度超乎人类的想象。

海岸线(带)是最浪漫也是最危险的景观。我常常幻想这样的场景:因为气候和环境的巨大变化,一群直立人离开可怖的草原,选择沿着海岸带走出非洲,沿途星空皎洁、水面如镜、沙滩平坦、视野开阔、气温宜人,食物丰富且容易获得。这种久远的对于海岸带的偏好,在人类的基因里烙下了深深的印记。海岸带景观往往与海滩、阳光联系在一起,是浪漫的代名词。这种浪漫产生于人们对未知彼岸和海底世界的憧憬,爱情、财富及长生不老是与海洋相关的永恒主题,如安徒生童话中的美人鱼、中国神话中的海底龙宫。但这种浪漫的泡沫往往被现实的残酷所打破——在2004年的圣诞节假期,印度洋海啸吞噬了在热带海岸享受浪漫假日的20余万人的生命。而年复一年发生的热带风暴所造成的生命财产损失,每年都在以惊人速度增长。

放眼当下和未来,由于全球范围内的气候变化,海岸带景观不仅面临着更多的风险和悲剧,其最值得珍惜的特质也在不断被损害。沿海防波堤早已打破了自然状态下海陆交融的微妙平衡,成为海水与陆地间"你死我活"的边界,大量环境敏感型生命已不复存在;来自陆地的污水和垃圾源源不断地倾入大海,使海陆交错带中的生命逐渐沉寂;六车道的沿海快速公路,将原本充满想象的、变化莫测的海岸带变得清晰明了、索然无味;千篇一律的海滩度假酒店更是扼杀了人们对于海岸的浪漫憧憬。

如果说人类只有一个地球的话,那么人类也只有一条海岸带!让我们珍惜海岸带的清晰和 不确定性,懂得其稀有和脆弱性,善待其丰富的自然和生命存在,多留下一些浪漫的远方!

Amre

## COASTAL LANDSCAPES

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Coastlines (and coastal zones) are simultaneously the clearest and most uncertain landscapes. In the Old Testament of the Bible, God created the divide between land and sea on the third day, proceeded only after the creation of light and darkness, and firmament:

"And God said, Let the waters under the heaven be gathered together unto one place, and let the dry land appear: and it was so."

In this origin story the world is divided into two, water gathered for the sea and dry land for land. In China, of the Wu Xing (Five Elements), earth and water are opposites meant to restrain each other. Thus, when they meet in space, the boundary between earth and water is clear; it is the coastline. This unmistakable divide is starkly mapped. For people and many other forms of life, this line is the edge between surviving and perishing.

I had a dream long time ago that I could walk along the coastline with one foot in the water and the other on land, and finally walk over the entire coastline of China, my motherland. I knew this dream was unrealistic: the coastline is ever-changing with the fluctuation of tides, and it is impossible to set foot on the same boundary between water and land twice. The coastline that we understand as a clear boundary through maps is an uncertain transitional zone between sea and land. This line (or belt) can reach a width of a few meters or several kilometers according to its academic definition.

The uncertainty of the coastlines (and coastal zones) is reflected in the changes between water and land. The coastline can change through erosion and sediment deposits, from fossils deposited through volcanic eruption, from alluvial through estuary extension — as is the case with the Yellow River estuary which extends several kilometers to the sea every year. Earthquakes, tsunamis, and other shocks can instantly destroy floodwalls and redefine the area between land and sea. These phenomena make the coastline change unpredictable, as an old saying goes, "With time, seas change into croplands and croplands change into seas."

Coastlines (and coastal zones) are also the most diverse and fragile landscapes on Earth. They are not the datum through which the opposition of earth and water are measured, but an interwoven zone of reinforcement for the two elements. It is a delicately balanced space reflected in regular changes in water volume, concentrations of salt and nutrients, the flow of wind, and changes in the temperature and rainfall. These variations produce distinctive and rich biocenoses: intertidal mangroves, tidal migrations of shellfish and fish, sea turtles that lay eggs on the land and live in the sea, and seabirds that shuttle between sea and land. These seemingly unpredictable states of neither land nor sea are dynamic

processes that are balanced if measured in millions of years. Their subtlety — such as turtles that lay their eggs on the same beaches at the same time every year but adjust their timing based on light and temperature changes — is beyond human imagination.

Coastlines (and coastal zones) are also the most romantic and most dangerous landscapes. I often imagine how the *Homo erectus* had to leave the dry grassland and head towards the coast, due to the huge impact by climate and environmental changes. Along their way, there were open view of clean and star-bright night, mirror-like waters, flat beach, pleasant temperatures, and plenty of readily-available food. Humans have long shown a preference for the temperate environments of the coastal zone, for which we associated these spaces with the beach, sunshine, and a romancing of the unknown other shore and underwater world. Love, treasure, and longevity are the eternal themes of the sea, from Hans Christian Andersen's fairytales to the Dragon Palace in Chinese myths. These romantic bubbles are often broken by cruel tragedies. The 2004 Indian Ocean tsunami killed more than two hundred thousand people along a tropical coast, and year after year the loss of life and property brought about by tropical storms is growing.

Today and into the future — due to global climate change — the most cherished qualities of the coastal landscapes are also at risk of being lost. Coastal breakwaters which have mediated the delicate balance of the land and sea are threatened and a large number of environmentally sensitive species have already been destroyed; lives living in the coastal zone also disappear because of sewage, trash, and other waste dumped into the sea; multi-lane expressways made the unpredictable coastal zone once full of imagination become unmistakably boring; and the artificial structures on the beach with a same looking have broken people's romantic imagination of the coast we desired to experience.

We only have one earth and we only have one coastline. Let us cherish the clarity and uncertainty of the coast, to learn from both its rarity and vulnerability, to treat well its natural resources and diverse creatures, and to let it remain a romantic other shore.

