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Transforming User to Co-manager 使用者转变为共同管理者

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Question?

- How to resolve the contradiction between wetland conservation and utilization?

如何化解湿地保护与利用之间的矛盾?





Solution: Based on the interest relations 解决方式：基于利益关系的湿地保护与利用矛盾化解

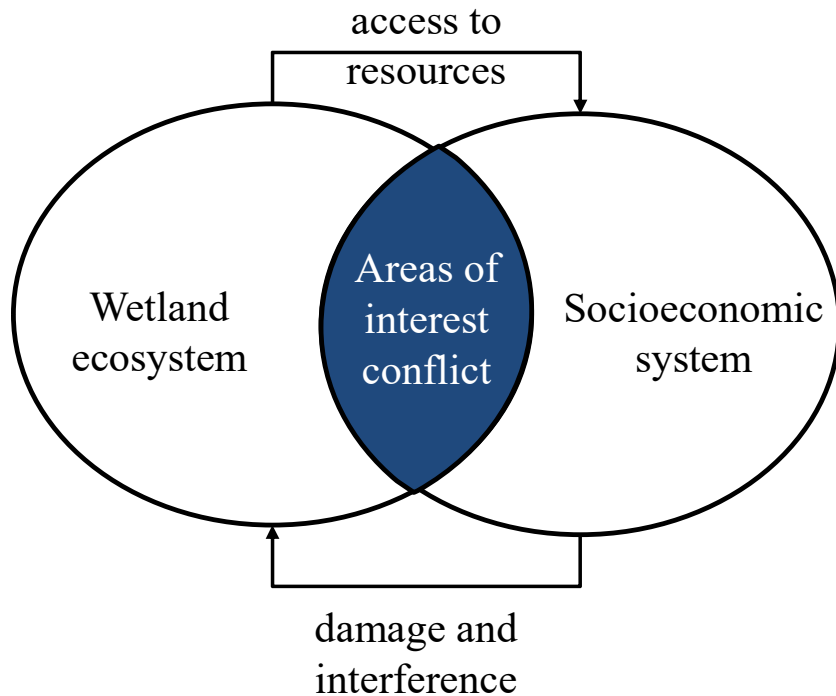
- The core of wetland conservation and utilization is the interest relations, and the contradictions are mainly caused by the conflicts of interests.
湿地保护与利用的核心是利益关系，其中存在的矛盾主要是由利益冲突所导致的

The major interests involved in the wetland conservation and utilization	Generated problems
ownership and interests of wetlands 湿地权属与利益关系	<ol style="list-style-type: none"> 1. “free rider” rent-seeking behavior caused by public wetland resources 湿地公共资源造成“搭便车”的寻租行为； 2. The unclear ownership of land leads to the struggle and conflict of ownership of wetland 土地权属不清晰造成权属争夺与冲突。
cost and benefit of wetland protection 湿地保护的直接与效益关系	<ol style="list-style-type: none"> 1. The direct cost of wetland protection is low and it is difficult to ensure the need of wetland protection 湿地保护直接成本投入少，难于保证湿地保护的直接需要； 2. The asymmetry between the cost and benefit of wetland protection and the regional inequity in wetland protection make the surrounding communities bear too many opportunities and indirect costs 湿地保护成本与收益的不对称及保护中的区域不公平，并使周边社区承担了过多的机会和间接成本。
wetland management and policy interests 湿地管理及政策利益关系	<ol style="list-style-type: none"> 1. The unity of wetland conservation and utilization at the national level and the conflict at the middle and micro levels 湿地保护与利用在国家层面的统一及在中、微观层面的冲突； 2. The contradiction and conflict between the object, purpose and means of legislation 相关立法对象、目的和实现手段的矛盾和冲突； 3. The conflict between management objectives and related interests among different management departments 不同管理部门的管理目标及相关利益的冲突。
wetland conservation and utilization 湿地保护与利用的利益关系	<ol style="list-style-type: none"> 1. Strict protection policies exclude the local communities from the use of wetland resources and artificially antagonize the conservation and utilization of wetlands 严格的保护政策将湿地所在地社区排除在湿地资源的利用范畴之外，人为地将湿地保护与利用对立起来； 2. Conflict between long-term economic benefits and short-term economic benefits of wetland utilization 湿地利用的长期经济效益和短期经济效益的冲突。

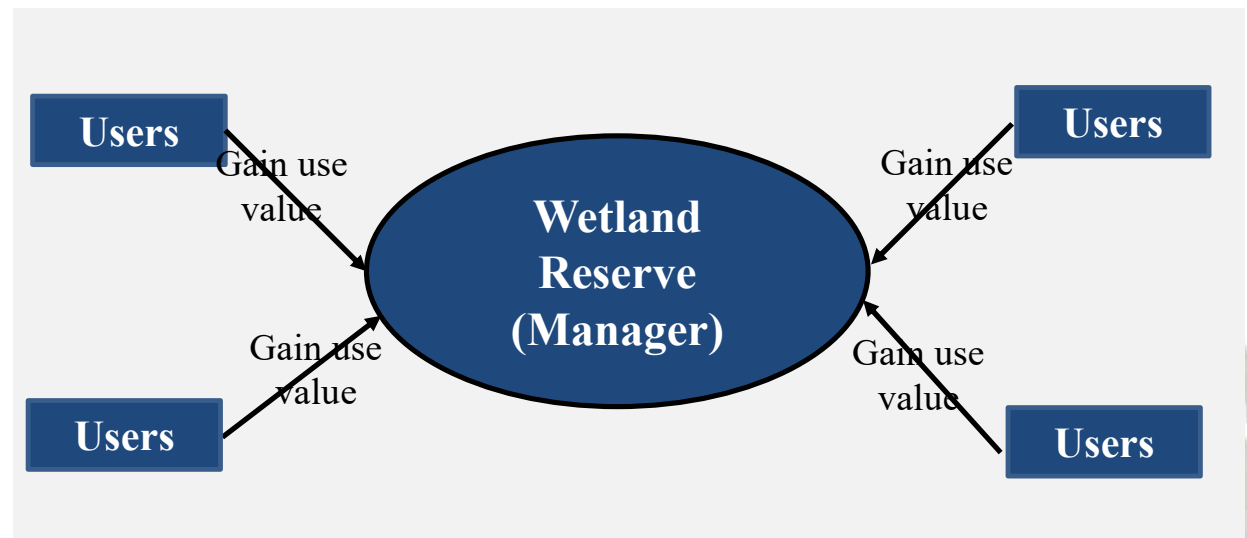


Solution: Based on the interest relations

- Based on the interest relations, the stakeholders involved participate in the protection and utilization of wetlands as users in order to obtain the use value. 基于利益关系，涉及的利益相关者是作为使用者参与到湿地的保护与利用中的，旨在获取使用价值。



Contradiction between wetland protection and utilization based on interest relationship



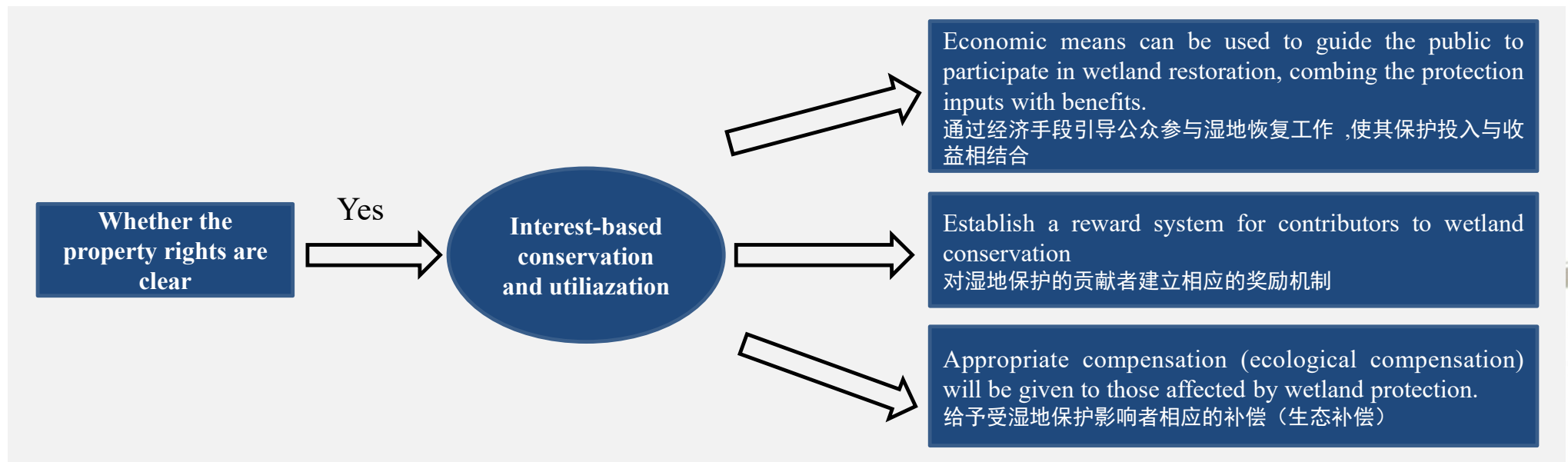
A wetland stakeholder relationship based on the acquisition of use value



Solution: Based on the interest relations

- On the basis of clarifying property rights, the relationship between different types of users and wetland conservation and utilization can be balanced and contradictions can be resolved with the help of interests.

在明确产权的基础上，借助利益来平衡不同类型使用者与湿地保护、利用的关系并化解其中的矛盾。



The idea of resolving the contradiction between wetland protection and utilization based on the interest relationship
基于利益关系的湿地保护与利用矛盾化解思路



Existing problems

- **The relationship between the user and the wetland is a one way use-used relationship: On the basis of the clear definition of property rights, the user participates in the wetland protection and utilization process as a user. The user is outside of the wetland human-land relationship system and is mainly related to such system through the acquisition of use value. Is there any other form of relationship? 使用者与湿地是单向的使用-被使用关系：在明确产权界定的基础上，以使用者的身份参与到湿地保护与利用过程的方式，使用者本身外在于湿地人地关系系统之外，主要通过使用价值的获取进行关联，是否存在其他形式的关系？**
- **Lack of consideration of other factors: the resolve of contradiction between wetland protection and utilization mainly depends on the coordination of economic interests. Can other factors such as culture, identity and local knowledge help to resolve the contradiction between wetland protection and utilization? 缺乏对其他因素的考虑：湿地保护与利用矛盾的处理主要依赖于经济利益的协调，文化、身份认同、地方知识等其他因素是否有助于化解湿地保护与利用矛盾？**



A Wetland Case at Mouth of Min River in Fujian Province 福建闽江河口湿地概况

- the wetlands of Minjiang River estuary
闽江河口湿地
- location: south side of the Mouth of Min River in the northeast of Changle District, Fuzhou 福州市长乐区东北部闽江入海口南侧
- The region covers 3 towns and 13 administrative villages 3个镇、13个行政村
- There are two parts: National nature Reserve and National Wetland Park
现有国家级自然保护区(2100公顷)和国家湿地公园(281.85公顷)两个部分
- Main protection objects: Rare and endangered waterbirds and estuarine wetland ecosystem
主要保护对象:珍稀濒危水鸟;河口湿地生态系统



Location map of the wetlands of Minjiang River estuary



Distribution map of the wetlands of Minjiang River estuary



The contradiction between aquaculture and the protection and utilization of the wetlands of Minjiang River estuary 养殖与闽江河口湿地保护与利用的矛盾

- The contradiction between farmers and wetland management is prominent: the surrounding villagers have been engaged in aquatic breeding production in the wetland for a long time, and the breeding pond has caused great damage to the ecological environment. The feeding and human activities in the breeding process will affect the habitat of waterbirds.

养殖户与湿地管理之间的矛盾突出:周边村民长期在湿地内从事养殖生产, 养殖塘对生态环境带来巨大破坏, 养殖过程中的饲料投放、人类活动都会影响水鸟栖息。





Work with villagers to assess the impact of aquaculture on wetlands 与村民共同评估养殖对湿地的影响

- In order to explore the breeding patterns of the surrounding communities in the experimental area and understand the impact of the patterns on the ecology of the reserve, the management office conducted a field investigation and interviewed village committees in Kefeng Village (克凤村) and Houdong Village (厚东村) in Tan Tou Town (潭头镇) and Fushan Village (阜山村) in Wenling Town (文岭镇), and formed the Social and Economic Interview Report on Aquaculture in Minjiang Estuary Wetland Nature Reserve (《闽江河口湿地自然保护区水产养殖社会经济面谈报告》)





Wetland Restoration Project —“Return the breeding grounds to wetland” “退养还湿” 湿地恢复工程

- On the basis of comprehensive assessment, in order to expand the area of waterfowl habitat and restore the ecological function, the conservation area carried out the project of “Return the breeding grounds to wetland”.
在综合评估的基础上，为扩大水鸟栖息地面积、恢复生态功能，保护区开展“退养还湿”工程。

In 2017, the project of "Return the breeding grounds to wetland" was launched.
“退养还湿”工程启动



2017



2018



2019



2020



In 2019, the comprehensive work of “retrofitting” breeding ponds was carried out within the reserve.
2019年，在保护区范围内全面展开养殖塘“退养改造”工作

Continue to the carry out the work of “Return the breeding grounds to wetland” on 1000 mu aquatic farms in the conservation area.将继续对保护内约1000亩养殖场开展“退养还湿”工作

In January 2018, a pilot aquaculture pond of 430 mu was launched in Kefeng District
2018年1月启动克凤片区430亩水产养殖塘试点

In August 2018, changle District Government issued the Compensation Scheme for Return the Breeding Grounds to Wetland at the Wetlands of Minjiang River Estuary to clear the aquatic farms in the experimental area from Wumen Gate to the old port wharf in Kefeng District. 2018年8月，长乐区政府颁布《闽江河口湿地养殖场退养补偿方案》，清退克凤五门闸至旧港口码头实验区内的养殖场

By March 2020, the reconstruction and restoration of breeding ponds in Kefeng, Houdong and Fushan areas had been basically completed.截至2020年3月已基本完成克凤、厚东、阜山片区养殖塘改造修复工作



The appearance of a wetland ranger 湿地管护员的出现

- How to deal with the farmers in the wetland has become the key problem in the project of "returning the breeding grounds to wetland". Through the implementation of ecological compensation and employment support policies, the management office enables the farmers who previously engaged in aquaculture and livestock breeding around the wetland to completely quit or partially quit breeding for a period of time and employ them as wetland rangers for years. “退养还湿”工程中，如何处理湿地内养殖户成为问题的关键。保护区管理处通过实施生态补偿和就业扶持政策，让原先在湿地周边从事水产和家畜养殖的农民，完全退出或部分时段退出养殖，长年聘请为湿地管护员。

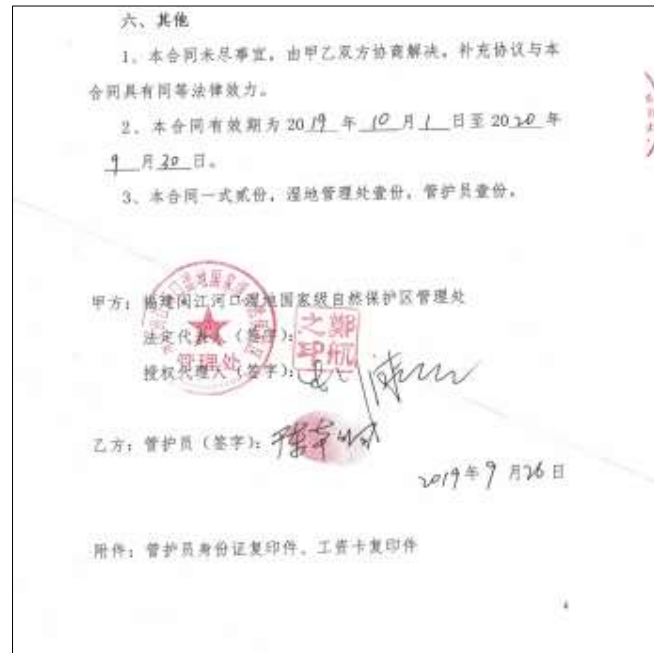
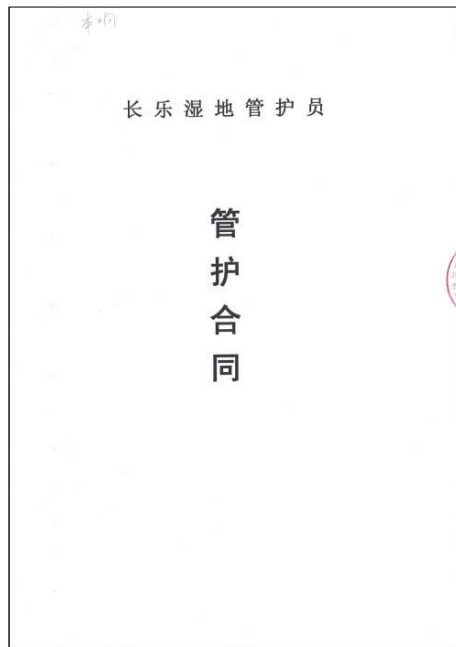




The management of the wetland rangers

湿地管护员的管理

- The wetland management office signs a contract with the rangers, and the rangers' work implements the system of “work contracted to individual - job rotation”. The full-time rangers are divided into several groups, and each group is responsible for the patrol and management of the corresponding responsibility area. 湿地管理处与管护员签订合同，管护员工作实行“个人包干-轮岗”制度，将受聘湿地专职管护员分成若干小组，每个小组负责相应责任片区的巡护管理工作。





The management of the wetland rangers 湿地管护员的管理

- The rangers are subject to the supervision of the Conservation Department. They are supervised by monitoring installed in wetland and GPS positioning equipments, and they are required to punch the "daily clock" and "monthly clock" in the process of daily patrol and protection. 管护员接受保育科的监督，通过湿地安设的监控以及GPS定位等设备实现对保育员的监督，在日常巡护的过程中需要进行“日打卡”和“月打卡”。

下载考勤规则

考勤

您有0条未读消息!

2020年4月考勤规则: (本月未完成)
本月考勤天数24天, 已完成 0天
本月考勤打卡点数4个, 已完成 0个

4月1日 2020 愚人节

日	一	二	三	四	五	六
29 初六	30 初七	31 初八	1 愚人节	2 初十	3 十一	4 清明
5 十二	6 十三	7 十四	8 十五	9 十六	10 十七	11 十八
12 十九	13 廿一	14 廿二	15 廿三	16 廿四	17 廿五	18 廿六
19 谷雨	20 廿八	21 廿九	22 闰四月	23 初五	24 初六	25 初三
26 初四	27 初五	28 初六	29 初七	30 初八	1 劳动节	2 初十

1日考勤规则: (当日未完成)
时长要求: 4小时, 已完成0小时
里程要求: 5公里, 已完成0公里
次数要求: 1次, 已完成0次

月考勤规则设置

地图 考勤规则

已设置月份: 2020-06 2020-07 2020-08 2020-09 2020-10 2020-11 2020-12

考勤月份: 2020-06 - 2020-06

考勤规则 考勤天数 每月需要完成考核 24 天

月打卡点 共享巡护轨迹打卡点 选择点 限制点 经纬度定位 虚拟打卡点 清除点

说明: 考勤规则可多选, 多选的规则必须同时满足才算当日完成考核!

考勤规则 时长 每天需要巡护 4 小时 (仅计算围栏范围内巡护时长)

里程 每天需要巡护 5 公里 (仅计算围栏范围内巡护里程)

次数 每天需要巡护 1 次 (设置的巡护点全部打卡才算一次)

说明: 考勤规则可多选, 多选的规则必须同时满足才算当日完成考核!

开始时间: 07:00:00

结束时间: 19:00:00



The training of the wetland rangers 湿地管护员的培训

- The rangers are regularly trained in knowledge related to wetland conservation, such as important bird identification and migration patterns. 管护员定期接受与湿地保护相关知识的培训，比如重要鸟类识别及迁徙规律等。



学海无涯
旅途问道



The responsibilities of the rangers who regarded as the wetland manager 作为湿地管理者的管护员职责

- The rangers carry out round-the-clock patrol of the whole wetland and its wildlife resources, prevent foreigners from entering and leaving the reserve at will to carry out activities unrelated to wetland protection, and actively cooperate with the local public security organs to jointly fight against illegal and criminal acts that destroy the wetland. 管护员对湿地全域及其野生动植物资源等进行全天候巡护管理，制止外来人员随意进出保护区开展与湿地保护无关的活动，并积极与当地公安机关进行共建，共同打击破坏湿地的违法犯罪行为。

二、乙方主要责任

1、贯彻、落实宣传《中华人民共和国野生动物保护法》、《中华人民共和国自然保护区条例》、《福建省湿地保护条例》及《福州市闽江河口湿地自然保护区管理办法》等相关法律、法规，切实履行湿地管护职责；

2、每日巡查应做到按时签到、签退并填报湿地巡护日志；

3、巡护期间，应统一着管护员服装并佩戴管护员袖章；

4、按照规定线路巡查管护本片区及自然保护区周边，制止各类破坏、侵占自然保护区，以及惊吓野生水禽，干扰鸟类繁殖、觅食等行为；

5、当值人员应做到保护区几处管理大门随开随锁，制止任何单位、组织及个人擅自进入自然保护区；

6、对执湿地管理处批条，同意进入自然保护区开展观测、

调研、拍照、摄影等活动的单位、人员，协助引导到指定地点并监督；

7、发现水禽病害疫情，及时上报湿地管理处，并协助开展各种水禽疫情监测工作；

8、制止任何人擅自移动、破坏自然保护区界碑（桩）标志及保护、监测设施设备的行为；

9、负责退养还湿区域水位的调控，确保湿地水禽栖息生境；

10、积极协助湿地管理处开展海漂垃圾清理、退养还湿、栖息地改造、科教宣传等各项活动；

11、对于片区内各种违法违规的现象，应及时取证，并第一时间向湿地管理处报告，必要时协助森林公安机关侦查案件。

三、主要职责

对不听劝阻乱捕滥猎野生动物、乱采野生植物及擅自进入保护区核心区、缓冲区进行各类活动的单位个人，有权制止并现场扭送林业公安机关或报请有关部门依法处理。



The responsibilities of the rangers who regarded as the wetland ranger 作为湿地管理者的管护员职责



Remove the net for catching birds
拆除鸟网



Clean up the garbage floating on
the surface of the sea
清理海漂垃圾



Clean up the garbage in the
wetland
清理湿地垃圾



Feedback from rangers on wetland management 管护员对湿地管理的反馈

- Based on the summary of work experience, the corresponding suggestions on wetland ecological restoration and conservation were put forward. 根据工作中的经验总结，对湿地生态修复与保育工作提出相应的建议。





The significance of absorbing and transforming farmers as wetland rangers 吸收转化养殖户为湿地管护员的意义

- Provide employment opportunities for the residents around the wetland and relieve the pressure caused by the conflict between ecological protection and local farmers' production and living activities;
为湿地周边居民提供就业机会，减缓生态保护与当地农民生产生活冲突形成的压力；
- Enhance the awareness of rural residents on wetland protection: the stakeholders in conflict with wetland ecological protection are transformed into the active protectors to improve their sense of responsibility for wetland protection;
让湿地生态冲突者转变为主动保护者，提高保护湿地的责任感；
- The local knowledge of rural residents are transformed into the valuable experience of wetland protection and management to form a management method that conforms to the specific situation of the wetland in Min River estuary;
将乡村居民的地方性知识转化为湿地保护与管理的宝贵经验，形成符合闽江河口湿地具体情况的管理方法；
- Promoting the identification and transmission of wetland ecological and cultural values, forming a sense of identity, which will be conducive to the wetland protection and the construction of a vibrant rural community;
促进对于湿地生态文化价值的认同与传递，形成身份归属感，有利于湿地保护，并创造活力的乡村社区。



The relationship between the shutterbug and the wetland utilization 摄影爱好者与湿地的利用关系

- Through the comprehensive utilization of wetland resources (photography sites, photography targets - birds), the shutterbug can take photos that meet their own purpose, thus creating a direct use of the wetland.

摄影爱好者通过对湿地资源（摄影场所、摄影目标-鸟）的综合利用，拍摄出符合自身目的的照片，产生了一种直接的使用关系。

- All human activities except monitoring are prohibited in the core area of the wetland. However, shutterbugs sometimes need to go deep into the core area, so there is a certain contradiction.

湿地核心区禁止除监测以外的一切人为活动，但是摄影师有时需要深入核心区，存在一定的矛盾。



Lin CHEN, Chinese famous ecological photographer

Representative works:
Thalasseus bernsteini (the Min River Wetland) 《中华凤头燕鸥》（闽江湿地）

Won the fourth place in the 2007 World Endangered Bird Photography Competition



Speaking with photographs: The reflection on the wetland protection and utilization of photographic works 用照片说话：摄影作品对湿地保护利用情况的反映

Photos of wetland ecological elements 湿地生态要素类照片

①Various water birds flight, feeding, breeding, raising young, splashing, rest and other behaviors, migration, clustering and other scenes; ②Different stages of vegetation growth; ③Various forms, habitats and living habits of benthonic life; ④Interactions between plants and animals and the environment, and the changes of mud flat (sediment accumulation, hydrological changes, tide fluctuations, etc.), etc.



Photos of wetland management 湿地管理类照片

①Newly built facilities and equipment in the protection area; ②Uncivilized bird shooting, bird watching and all acts that destroy wetlands and their resources, facilities and equipment; ③Areas where sea drift garbage is not cleaned in time or has not been cleaned for a long time; ④Whether there are signs of artificial breeding in retreat area; ⑤Vegetation growth in the treatment area of spartina alterniflora loisel; ⑥The living resources in the reserve in recent years, mainly is the regional distribution of waterbirds, the number of changes in the situation.



Photos for promotion and display 宣传、展示类照片

①Work photos in the wetland; ②Birds, vegetation, landscapes; ③Closeup of a bird, used for the promotion on the platform of Eyes of the Secret World (a documentary film on CCTV) and other platforms.





Photography and the grasp of knowledge about wetlands and birds 摄影与湿地、鸟类知识的掌握

- Photographers need to have a systematic understanding of the ecological environment, bird habits, tidal level, weather, etc. in the wetlands. Their photographic experience will in turn update and deepen their cognition of the wetland.

摄影师需要对湿地的生态环境、鸟类习性、潮位、天气等进行系统的了解，他们的摄影经历反过来会更新、深化对湿地的认知。

“In my view, it is not easy for an ecological photographer to take a good picture of one or two birds around him, starting from studying their postures, their living conditions and habits. What's more, he will get unexpected gains if he continues to take pictures like this. 在我看来，能拍好身边的一两种鸟，从研究姿态、他们的生存状态，再到生活习性入手，把它们拍到极致，对一个生态摄影师来说就已经很不容易了，而且这么拍下去，也会得到意想不到的收获。”

“Another important part of photographing birds, I think, is to understand the birds you are photographing.....we need to understand the weather, the tide level, the habits of birds, Only the combination of the right time and the right place can make a good film. 拍鸟还有一个重要的环节，我觉得就是要了解你所拍摄的鸟。正所谓摄影的功夫在诗外，我们要懂天气、懂潮位、懂鸟的习性，唯有天时地利人和结合在一起才能出好片。”

From an interview with photographer Chen Lin:

<http://article.photofans.cn/article-52405-1.html>

“I am a more serious person, since this film, I want to know when it will come, when to go... The results showed that there were not only spooned snipe in the mouth of Minjiang River, but also a large number of them. Once I saw up to 30 snipe! ... According to surveys at the time, there were at most 600... . Looking through my records for several years in a row, I found that Fuzhou was the wintering place of spoon-billed sandpiper, which changed the misunderstanding that the Chinese coast was only the site of migration of spoon-billed sandpiper. 我是个比较较真的人，自从拍了这张片子后，我就想知道它什么时候来，什么时候走……. 结果表明，闽江口不但有勺嘴鹬，而且数量庞大，我有一次最多看到30只！… 据当时调查，全球最多只有600只… 翻看了我连续几年下来的记录，更证明福州是勺嘴鹬的越冬地，这改变了人们一直以来以为中国沿海仅仅是勺嘴鹬迁徙地的错误认知。”

From an interview with photographer Chen Lin:

http://www.360doc.com/content/17/0203/22/29548917_626312371.shtml



Knowledge transformation: “Like to photograph birds” experience sharing session with wetland management feedback

知识转化：“爱拍鸟”经验交流会与湿地管理意见反馈

- The management office organizes bird photography experience exchange meeting, which mainly introduces the recent work of the Min River Estuary wetland, the management rules for visitors to enter the area, the exchange for bird photography skills, and the exchange and suggestions for wetland conservation and utilization. 管理处组织爱拍鸟经验交流会，主要介绍闽江河口湿地近年开展工作情况及访客入区管理规则，鸟类摄影技巧交流，湿地保护与利用心得交流与建议。

Category	Specific content
Wetland protection 湿地保护	①The water level in the retreat and return wet area is too deep, which requires different depths. Lotus and other aquatic plants can be planted in the pond (退养还湿区水位过深，需要深浅不一，塘内可种植荷花等水生植物); ②The quantity of the benthic life should be monitored to solve the problem of soil desertification (针对土壤沙质化的问题，做好底栖生物量监测).
Wetland management 湿地管理	①Setting up flushing area (设立冲洗区); ②Beach breeding areas and garbage management should be separated, and when breeding season begins in May, warning signs should be set up (沙滩繁殖区和垃圾治理要分开，5月进入繁殖期，需设立警戒牌).
Visitor management 访客管理	①The rules for visitors entering the park are suggested to be formulated for different zones (入区规则建议针对不同分区制定).
Community relations 社区关系	①Strengthen communication with razor clam farmers, regulate their behavior to reduce human interference; If the relevant judicial departments do not act, they should also reflect. (同养蛸户加强沟通，规范行为，减小人为干扰，司法部门如不作为也要反映)
Wetland publicity and education 湿地宣教	①Summarize the achievements and expand the political effect (总结所的成绩，扩大政治效应); ②Use participants to set up an ecological tour guide team (利用参会人员，成立生态导赏队伍); ③Strengthen wetland science popularization education, built water-sider platform outdoors, fully utilize Museum areas, and carry out parent-child and interactive science popularization education activities (加强湿地科普教育，户外考虑建设亲水平台，博物馆内区域要充分利用，可开展亲子、互动类科普教育活动); ④Do special science popularization publicity, such as “One Bird One Week” (做专题科普宣传，如“每周一鸟”等); ⑤Hold campaigns on the achievements, including photography, scientific research outcomes and applications (举行成果宣传活动，包括摄影、科研成果及应用等)



Responsibility of photographers: From photographing birds to loving birds and wetlands 摄影师的职责：爱拍鸟转化为对鸟、湿地的爱

- With the deepening of the relationship between photographers and wetlands, a simple hobby of photographing birds is gradually transformed into the love for wetlands and their birds, and this love is further promoted as a social responsibility, which affects more people's understanding of wetlands and their protection of wetland ecology. 随着摄影师与湿地关系的深入，逐渐将爱拍鸟的一种简单爱好转变为对湿地及其中鸟类的爱，并将这种爱进一步上升为一种社会责任，影响更多的人认识湿地、保护湿地生态。

"My photo of the Chinese Sterna Bernsteinii won the fourth place in the 2007 World Endangered Bird Photography Contest and I was the first Chinese to win the contest. I didn't really think much of the award itself, but I thought it was a good way to photograph the endangered Chinese Sterna Bernsteinii and to document the changes in the ecological environment around me. Personally, I am glad to see that the environment we live in is getting better and better, and more and more birds are coming to us. As a photographer documenting ecology, this is the result I would like to see most.

我拍摄的中华凤头燕鸥，在2007年的世界濒危鸟类摄影大赛上获得了第四名，也是首位在该赛事中获奖的华人。我其实对于这个奖项本身并不十分看重，但是对于拍摄中华凤头燕鸥这种濒危鸟类，记录下我身边生态环境的变迁，我认为这还是起到了很好的作用的。我个人也很欣喜地看到，我们生活的环境越来越好，越来越多的鸟种来到了我们身边。作为记录生态的摄影师，这也是我最愿意看到的结果。”

From an interview with photographer Chen Lin: <http://article.photofans.cn/article-52405-1.html>

Question: Why have you been photographing birds for so many years?

问：您为什么这么多年来一直坚持拍鸟？

Answer: I hope that more people who don't know anything about birds can enjoy my film, and then pay attention to and love birds, which is also my responsibility as an ecological photographer.

答：我希望能让更多不懂鸟的人喜欢上我的片子，然后去关注鸟，爱护鸟，这也是我作为一名生态摄影师的职责所在。

From an interview with photographer Chen Lin:
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The significance of involving bird photographers into the wetland management 吸纳拍鸟者参与湿地管理的意义

- The relationship between photographers and wetlands is not limited to the direct use of interests, and there is no relationship based on property rights. Hobbies, professional knowledge, responsibility and emotion are the core link between photographers and wetland management 摄影师与湿地之间的关系不限于直接的使用利益关系，不具有基于产权的关系，爱好、专业知识、责任与情感是摄影师与湿地管理的核心纽带；
- The photography activities of wetland photography lovers need to go deep into specific areas, and their experience and corresponding photographic works can reflect the condition of the protection and utilization of specific wetland areas 湿地摄影爱好者的摄影活动需要深入到特定区域，他们的这种经历以及相应的摄影作品能够反映湿地特定区域的保护与利用情况；
- The exchange meeting for the bird-photography experience is an important way for shutterbugs (external elite group) to participate in wetland management. The shutterbugs are people with bird-loving feelings and certain knowledge of wetland biology. They come from all walks of life and can feedback their experience and observation results to the management staff to improve wetland management 拍鸟经验交流会是摄影爱好者（外部精英群体）参与湿地管理的重要方式，他们是具有爱鸟情怀以及掌握一定湿地生物知识的人士，他们来自各行各业，能够将自己的经验与湿地观察成果反馈给管理人员，完善湿地管理；
- The shutterbugs are important media for the dissemination of wetland management condition and ecological knowledge, so that more people can know about the situation of wetlands. They can enhance the influence of wetlands, and promote the communication and understanding between the wetland and the public 摄影爱好者是湿地管理情况与生态知识传播的重要媒介，使更多的公众了解湿地的情况，而且能够提高湿地的影响力，推动湿地与公众之间的沟通与理解。



Discovery 1: Users are transformed to be co-managers

- Community farmers and shutterbugs have changed from unidirectional users of wetland resources to co-managers of wetland conservation and utilization 社区养殖户和摄影爱好者从单向的湿地资源的使用者转变为湿地保护与利用的共同管理者；
- The role of co-managers transform the simple use of interest relationship into a symbiotic relationship between people and land, that is, an interdependent relationship among multiple subjects and the interdependence between subjects and wetlands 共同管理者的角色超越了单纯的使用利益关系，转变为人地共生关系，多主体之间、主体与湿地之间是相互依赖的关系；
- In the symbiotic relationship, the relationship between each subject is internalized, and the co-managers reach a consensus on the contradiction between wetland protection and utilization within the framework of the symbiotic relationship, which promotes mutual understanding. Conflict is resolved within the symbiotic relationship, reducing externalities 在共生关系中，各主体的关系内部化，共同管理者就湿地保护与利用的矛盾在共生关系框架内达成了共识，促进了相互理解，冲突在共生关系内部进行解决，减少了外部性。





Discovery 2: Cultural and emotional factors play an important role in transforming users into co-managers, facilitating the conflict resolution of wetlands 文化、情感因素对使用者转变为管理者并促进湿地矛盾化解具有重要作用

- The transformation into a manager's identity promotes his/her value identification of wetland ecological culture. Based on this, a corresponding sense of identity is formed, which in turn strengthens support for wetland ecological protection and forms a virtuous cycle.

转变为管理者身份促进了其对湿地生态文化的价值认同，基于此形成了相应的身份归属感，这反过来会强化对于湿地生态保护的支持，形成一种良性循环；

- This cycle is expandable, which can improve the influence of wetlands and create vibrant local communities around wetlands. It is also a cultural representation of the symbiotic relationship between man and earth.

这种循环过程具有扩展性，可以提高湿地的影响力，在湿地周边创造富有活力的地方社区，这也是人地共生关系的一种文化再现；

- Local knowledge, knowledge based on personal expertise and experience, and emotion are important supplements to the solution of wetland conservation and utilization

地方性知识、基于个人专业与经历的知识、情感是化解湿地保护与利用的重要补充。



The world that tourism scholars know is only a part of this world, but our way of knowing is to discover the beauty of this world!

旅游学者所认知的世界，
只是这个世界的一部分，
但我们的认识方式，
是发现这个世界的美丽与美妙！

