

ラムサール条約湿地登録から10年

～渡良瀬遊水地における
賢明な利用をめざす取り組み～

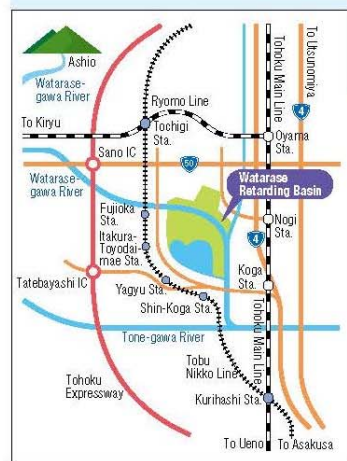
小山市長
浅野 正 富

Guide Map of Watarase Retarding Basin



渡良瀬遊水地は日本最大3300haの遊水地で、本州以南最大の1500haのヨシ原があり、日本を代表する低層湿原

登録基準1:特定の生物地理区内で代表的、希少、または固有の湿地タイプを含む湿地に該当して2012年7月3日にラムサール条約湿地に登録



Abundant nature supporting many life forms

Plants

1,000 species (60 of them endangered)

After the spring burn-off the marsh is densely covered with plants rarely found elsewhere, including *Ophioglossum namegatae* and *Galium tokyoense*. Communities of *Euphorbia adenochlora* appear yellow. *Artemisia feddei* gives off a rich aroma.



Amsonia elliptica (endangered) photo: Joji Nemoto



Euphorbia adenochlora (endangered)



Ophioglossum namegatae (endangered) photo: Yosuke Horiuchi

Insects

Approx. 1,700 species (23 of them endangered)

The retarding basin is a treasure house of insects and *Chrysolina virgata*, *Phyllobius japonicus* and other rare wetland insect species are commonly found. It is abundant with endemic insect species, including *Anthicus watarasensis*.
photos: Hideo Ohkawa



Chrysolina virgata (classified as "Near Threatened" by Tochigi Prefecture)



Hippodamia tredecimpunctata (classified as "Noteworthy" by Tochigi Prefecture)



Phyllobius japonicus



A female Common Kestrel receiving prey food from the male

Wild birds

252 species (44 of them endangered)

Reed warblers stage a huge chorus in early summer. The retarding basin becomes a stopover for shorebirds during their spring and autumn migrations. It supports 25 species of falconiformes and strigiformes, which are at the top of the food chain. The species richness of raptors is one of the highest in Japan.
photos: Tetsuo Hgano



Long-billed Dowitcher



Black-browed Reed Warbler



Great Bittern (endangered)





良好なヨシ原形成
のため毎年3月に
行われるヨシ焼き





湿地保全・再生基本計画 イメージ図

渡良瀬遊水地は、永年条約湿地登録が望まれていましたが、国土交通省が管理する河川区域で治水のための施設であることから、登録に向けた具体的な動きはなかった。

しかし、1997年に河川法が改正され、法の目的に「河川環境の整備と保全」が加えられた以降国土交通省の方針も変わり、渡良瀬遊水地でも2010年に国土交通省利根川上流河川事務所が乾燥化が進んでいる湿原に掘削によって以前のような池が点在する約20%を水面とする環境を取り戻し、かつ遊水地の治水容量向上も図る「渡良瀬遊水地湿地保全・再生基本計画」が策定された。

これにより、土地利用規制は従前から指定されている河川法に基づく河川区域により、鳥獣捕獲規制は新たに普通地区の国指定鳥獣保護区の指定によって渡良瀬遊水地は条約湿地に登録されることになり、2012年7月3日に登録が実現した。

右の写真は下の写真の矢印の方向から撮影された掘削により作られた池の写真



左の写真は掘削が始まって10年目の2019年1月19日に撮影

湿地再生が進みイメージ図に近くなってきた第2調節池



左上下写真
ヤナギ・セイタカアワダチソウ
除去作業

右上写真
外来魚除去作業

富士山をバックにした第2調節池の平常時の写真(左)と2019年10月の台風で河川水を貯留して満水になった時の写真(下)

この時は遊水地全体で約1億6000万tの河川水を貯留した



1971年に野生のコウノトリが絶滅したが人工飼育が続けられ、兵庫県豊岡市で2005年から放鳥が始まってコウノトリの野生復帰が実現。

同様に一旦野生絶滅したトキも新潟県佐渡市で人工飼育された個体の放鳥が行われ野生復帰が実現。

渡良瀬遊水地では、条約湿地登録後に湿地生態系の豊かさをさらに向上させるため、コウノトリやトキが定着・繁殖できる環境を目指した。

コウノトリやトキの採餌環境を整備するため、遊水地の周辺の水田地帯で従来から行ってきた化学農薬・化学肥料を低減した稲作に加え、無農薬・無化学肥料の米の生産を開始し、水田決議を実践。



2005年豊岡市でのコウノトリ放鳥

写真／神戸新聞

Appendix 1: Resolution X.31 Enhancing biodiversity in rice paddies as wetland systems

1. RECOGNIZING that rice is grown in at least 114 countries worldwide and, as the staple diet for over half the world's population, has contributed to about 20% of the total calorie supply in the world;

2. AWARE of recent concern over global food supplies and costs and the need for increasing food production, and ALSO AWARE that Resolution X.23 on Wetlands and human health and well-being highlights the interdependencies between human health, food security, poverty reduction and sustainable wetland management and calls for Contracting Parties to "strengthen collaboration and seek new partnerships between the sectors concerned with wetland conservation, water, health, food security and poverty reduction";

3. RECOGNIZING that rice paddies (flooded and irrigated fields in which rice is grown), a typical agricultural landscape for a significant proportion of world rice cultivation, have provided large areas of open water for centuries in regions with a variety of rice-growing cultures, and, in addition to producing rice, also provide other animal and/or plant food sources and medicinal plants, thus acting as wetland systems and helping to sustain livelihoods and human well-being in these regions;

4. NOTING that rice paddies in many parts of the world support important wetland biodiversity, such as reptiles, amphibians, fish, crustaceans, insects and molluscs, and play a significant role in waterbird flyways and the conservation of waterbird populations;

5. FURTHER RECOGNIZING that aquatic biodiversity associated with rice paddies can make an important contribution to the nutrition, health and well-being of rural populations;

6. RECOGNIZING ALSO that in some particular regions, it is important that irrigated rice paddies remain connected to surrounding natural/semi-natural habitat, in particular to wetlands, for the sake of biodiversity;

7. RECALLING that "rice fields" are included in the Ramsar Classification System for Wetland Type as a human-made wetland ("Type 3 Irrigated land; includes irrigation channels and rice fields") and thus, where appropriate, may be designated as, or included in, Wetlands of International Importance (Ramsar sites), and that at least 100 designated Ramsar sites around the world include rice field habitats that play important ecological roles and support a range of biodiversity, including supporting internationally important populations of breeding and non-breeding resident and migratory waterbirds;

8. NOTING that some sites associated with rice paddies are or could be included in the Globally Important Agricultural Heritage Systems (GIAHS) Programme, which was initiated by the Food and Agriculture Organization of the United Nations (FAO) and promotes the dynamic conservation of areas important for indigenous techniques and cultural and biodiversity values, and RECOGNIZING that such sites could provide examples of wetland wise use;

9. CONCERNED about current and potential threats to the role of rice paddies as sustainable wetland systems, as well as about the potential and current impacts to the surrounding environment, caused by factors such as inappropriate agricultural practices relating to water management and change of natural flow, as well as introduction of new taxa, including invasive alien species, use of high levels of harmful agricultural chemicals, and the impact of inappropriate conversion of rice paddies to other land uses;

10. NOTING that some water management approaches, such as flooding of rice paddies when they are not in use for rice production, have been adopted in order to provide suitable habitat for some fauna, including migratory waterbirds, and to control weeds and pest insects;

11. ALSO CONCERNED that inappropriate conversion of wetland to paddy field may have potential negative impacts on local biodiversity and related ecosystem services, and AFFIRMING that this Resolution is not to be used to justify conversion of existing natural wetlands into human-made wetlands, nor to justify inappropriate conversion of land to human-made wetlands;

12. ALSO AFFIRMING that the focus of this Resolution is specifically on the maintenance and enhancement of the ecological and cultural role and value of appropriate rice paddies as wetland systems, consistent and in harmony with the Convention, internationally agreed development goals, and other relevant international obligations;

13. RECALLING that Resolution VIII.34 (2002) highlighted, inter alia, the importance of ensuring that agricultural practices are compatible with wetland conservation objectives and that sustainable agriculture supports some important wetland ecosystems, and AWARE of the work currently being undertaken in response to Resolution VIII.34 by the Scientific and Technical Review Panel (STRP) and the Guidance on Agriculture-Wetlands Interactions (GAWI) initiative with the FAO, Wageningen University and Research Centre, the International Water Management Institute

(IWMI), Wetland Action, and Wetlands International, including the preparation of a framework for guidance related to interactions between wetlands and agriculture; and

14. NOTING that information and products related to rice paddy farming are available through the work and publications of the Organization for Economic Cooperation and Development (OECD) on agriculture and biodiversity, including aagri-biodiversity indicators; that information on wetland, water and rice farming is available in the Comprehensive Assessment of Water Management in Agriculture (CA); and that the analyses of distribution and representativeness of Ramsar wetland types, currently being undertaken by the IWMI for the STRP, include, inter alia, rice paddies as human-made wetlands;

THE CONFERENCE OF THE CONTRACTING PARTIES

15. ENCOURAGES Contracting Parties to promote further research on flora, fauna and ecological functions in rice paddies and on the cultures that have evolved within rice-farming communities that have maintained the ecological value of rice paddies as wetland systems, in order to identify sustainable rice paddy farming practices that reinforce wetland conservation objectives and provide ecosystem services such as groundwater recharge, climate moderation, flood and erosion control, landslide prevention, provision of plant and/or animal food resources and medicinal plants, and the conservation of biodiversity;

16. INVITES Contracting Parties to consider offering recognition and/or protection to such sites through, for example, their designation as Wetlands of International Importance and through mechanisms such as the FAO Globally Important Agricultural Heritage Systems Programme, and FURTHER INVITES Contracting Parties to disseminate and exchange information on these practices and sites amongst governments, farmers and conservation agencies, in order to support improvement of sustainable rice farming practices and water management;

17. ENCOURAGES Contracting Parties to:

i) identify challenges and opportunities associated with managing rice paddies as wetland systems in the context of the wise use of wetlands, also paying attention to the concept of connectivity between rice paddies, natural wetlands and river basins, as well as to the promotion of sustainable agricultural practices, and furthermore to encourage conservation authorities to collaborate with agriculture authorities and those agencies responsible for rice production and disease prevention to identify and actively promote planning, farming practices, and water management in rice paddies that serve to enhance the natural biodiversity, ecosystem services, and sustainability of rice paddies, while also contributing to improved nutrition, health and well-being of farming household members and surrounding community members and to the conservation of waterbird populations;

ii) ensure that such planning, farming practices, and water management are implemented wherever applicable, making appropriate use of the Ramsar guidance on wetlands and river basin management adopted in COP10 Resolution X.19 so as to ensure that river basin processes and possible upstream and downstream effects of rice paddy farming are considered, while being conscious of the need for food production and the interests of local communities;

iii) ensure that planning, farming practices, and water management associated with rice paddies do not lead to loss of existing natural biodiversity and ecosystem services through inappropriate conversion of natural wetlands or other habitats to human-made wetlands; and

iv) consistent with the measures identified above, seek appropriate environmentally sustainable ways of minimising risks to human health associated with waterborne diseases, disease vectors (including Highly Pathogenic Avian Influenza), and excessive and inappropriate use of agricultural chemicals in rice paddies; and

18. REQUESTS the Scientific and Technical Review Panel, working with other interested organizations, to:

i) prepare a technical report on the role of rice paddy in supporting the conservation of wetland biodiversity and the delivery of wetland ecosystem services, taking into account differences in the ways in which rice fields are managed, considering also the work of the GAWI partnership; and

ii) review, disseminate, and exchange available guidance and information related to rice paddy planning, management practices and training on sustainable rice farming that protect or enhance wetland biodiversity and ecosystem services while also supporting essential food production, in collaboration especially with FAO, IWMI, the International Rice Research Institute (IRRI), the Africa Rice Centre (WARDA), the GAWI partnership, and others.

2018年2月17日に再飛
来した「ひかる」は2月23
日に第2調節池に人工巣塔が
設置されると翌日から枝を運
んで巣作りを始めた



2018年2月24日撮影

2019年3月16日のヨシ焼き

ヨシ焼きの炎と煙に包まれても人工巣塔を離れなかった「ひかる」



2019年夏

ペアになる前、見つめ合う
「ひかる」と「歌」



2020年夏最初に誕生した
ヒナ「わたる」と「りょう」

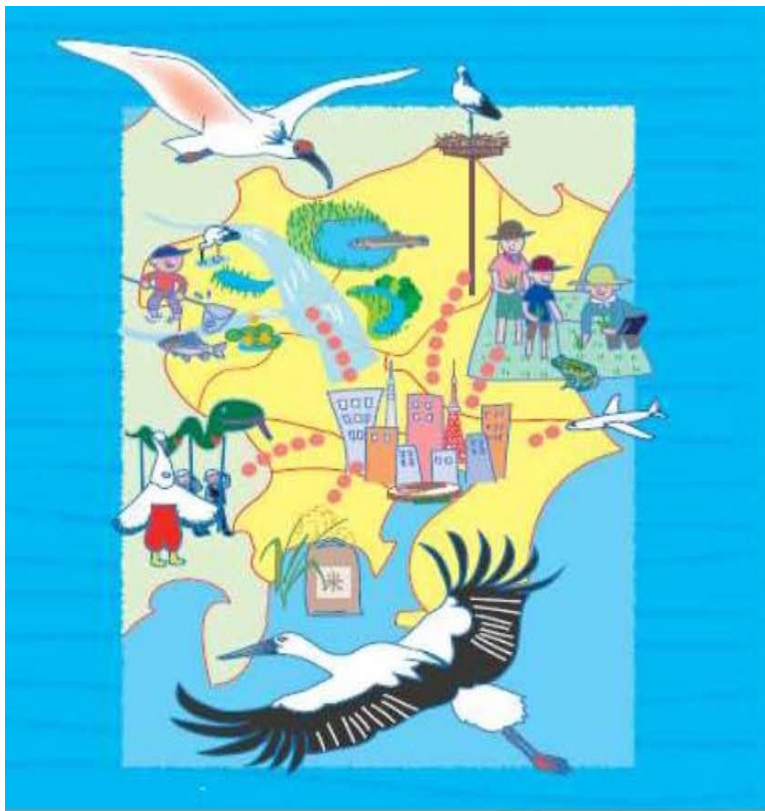
2022年夏「ひかる」と「レイ」
に2羽のヒナ「セラ」と「ひなた」





2021年冬 10羽近くのコウノトリが集うように





コウノトリ・トキの棲む関東を目指して地域間連携による エコロジカルネットワーク形成に取り組む

ネットワークに加盟している野田市で飼育放鳥されたコウノトリがネットワークに加盟している渡良瀬遊水地の小山市で繁殖しており、遊水地での定着・繁殖はネットワーク連携の成果

放鳥されたトキが定着繁殖する環境づくりを行う「トキとの共生を目指す里地」にネットワーク27市町のうち遊水地エリアを含む18市町が選定された

渡良瀬遊水地での賢明な利用

湿地の賢明な利用の定義は、「持続可能な開発の考え方に立って、生態系（エコシステム）アプローチの実施を通じて、その生態学的特徴の維持を達成すること」（決議IX.1 付属書A）

渡良瀬遊水地とその周辺の水田地帯では、遊水地の条約湿地登録はゴールではなく、スタートとして、その湿地生態系の維持だけでなく向上をめざし、利害関係者の連携によって、この10年間で、湿地再生・治水容量の向上、周辺水田地帯での生物多様性を向上させる農法での稲作の普及を行ってきた。

その成果がコウノトリの定着・繁殖であり、コウノトリは渡良瀬遊水地の条約湿地登録後の賢明な利用を進めてきたことのシンボルである。今後はトキの定着・繁殖を視野に入れてさらに賢明な利用を進め、コウノトリ、トキの飛び交う渡良瀬遊水地と周辺水田の実現をめざして行く。