

Land-claim and recreational pressure on British estuaries

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ABSTRACT ONLY

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Britain has as large and varied estuarine resource of major wildlife importance, notably for migrant and wintering waterfowl on the East Atlantic flyway. A major review of these estuaries in the late 1980s has permitted analysis of patterns of land-claim and human uses throughout the resource. Over 25% of intertidal land has been claimed during the last 2,000 years and many estuaries were facing further habitat loss or degradation. Recreational pressure, for example boating and its associated infrastructure, was greatest on small and medium-sized estuaries. The simple data collation methods used provide a model for such assessments on a flyway scale.

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Большие и разнообразные запасы эстуариев рек в Великобритании имеют большое значение для диких животных, прежде всего для перелетных и зимующих водоплавающих и околоводных птиц на Восточноатлантическом пролетном пути. Широкомасштабное исследование этих эстуариев в конце 1980-х гг. позволило провести анализ типов освоения земель и их антропогенного использования. Было освоено свыше 25% приливно-отливной зоны в течение последних 2,000 лет, и многие эстуарии были под угрозой дальнейшего сокращения и еще более интенсивной деградации биотопов. Рекреационная нагрузка, такая как, парусный спорт и связанная с ним инфраструктура, была наибольшей на небольшие и средние эстуарии. Применяемые простые методы сбора данных служат образцом таких оценок в масштабе целого пролетного пути.

Britain's estuaries are unrivalled in western Europe for their number and diversity of form and wildlife. Britain has international commitments to maintain and enhance the habitats and wildlife of its many internationally important estuaries. Estuaries have been used by mankind for many centuries for a great variety of purposes, and many of these human uses have led to progressive damage and destruction of estuaries and their wildlife.

Concern over these pressures led the British Nature Conservancy Council to establish in 1988 its Estuaries Review with the objective of providing the basis for the development of a conservation strategy for British estuaries. The review collected information on the wildlife of all 155 British estuaries, and the conservation status and the patterns of over 200 human activities on each of these estuaries (Davidson *et al.* 1991). It was subsequently extended to UK coverage with the inclusion of the eight estuaries in Northern Ireland. The review has allowed description of the extent of past, present and proposed habitat loss and its implications for wildlife, and the distribution of recreational and other uses of estuaries. The review

and its associated inventory of estuaries (Buck 1993-97; Davidson & Buck 1997) provides a useful model for the compilation of human use information at international and flyway scales - key information needed for developing flyway conservation strategies.

At least 85% of British estuaries have lost intertidal habitats through human activities, and at least 25% of all intertidal land has been claimed during the last 2,000 years. Many current land-claims are for rubbish and waste disposal, and in 1989 135 further land-claim proposals affected 55 estuaries (Davidson *et al.* 1995). Land-claim leads to overall loss of estuarine habitat, reduction in the biomass and production in an estuary, reduced feeding time for waterfowl (with increased risk of severe weather mortality), decreases in waterfowl populations on some estuaries, and the focussing of development and recreation onto ever smaller estuarine areas. Land-claim and industrial activities such as harbours and docks, and the maintenance dredging of shipping channels occurs most frequently on large estuaries, but the pressure from land-claim may be highest on small estuaries.

Many recreational activities, such as sailing, walking, swimming and bird-watching are even more widespread and take place on over three-quarters of British estuaries. Associated with these uses is the increasingly widespread construction of shore-based facilities such as boating marinas. By 1989 there were already marinas on 30% of British estuaries. Proposals for more affected 27% of estuaries including 18 that then had no marinas.

Like land-claim, the pressure of existing and proposed marinas seems to be greatest on small estuaries although current marinas most frequently serve the recreational boating needs on medium-sized estuaries (1,000-10,000 ha) (Davidson 1991). Recreation, especially where it is carefully zoned so as to avoid sensitive wildlife locations or times of year, often has little apparent impact on estuarine wildlife. At the wrong times and places, however, it can and does cause disturbance to habitats and animals (see Davidson & Rothwell 1993; Davidson 1997), and leads to habitat loss and damage from dredging and amenity developments such as tidal barriers, housing and car-parks and marinas.

Future estuarine safeguards in Britain require the development of integrated conservation and management strategies for individual estuaries in a national and international framework, and aimed at sustainable use of the important remaining estuarine areas. There are an increasing number of

new initiatives, often involving collaboration between local government, statutory wildlife, countryside and sea defence agencies, and voluntary conservation groups that are attempting to achieve this.

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