

A Case of Utilizing Results

Preparation of "Manual for Evaluating the Invasiveness of Plants Introduced to Rivers" (Draft, tentative title)

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1. Background "Manual (draft)" preparation

In the "National Strategy for the Conservation and Sustainable Use of Biological Diversity 2012-2020" (Sep. 2012), as one of the national targets of Japan to achieve the Aichi Target, it is required to develop an "Invasive Species List" and "Invasive Alien Species Control Action Plan (tentative)" by 2014, so discussions are underway accordingly.

In riverbeds, many plants including alien plants are used for levee armoring, planting in river parks, etc. (Figure). Some alien species are invasive and escape from the originally seeded / grown area, whereby affecting native species and ecosystems. Therefore, when using an alien species as a garden plant (Photo) in a riverbed or afforestation project, it is necessary to grasp in advance its escape and settlement risks.

Therefore, as reference material for selecting plants that do not impact the natural environment or river management, we developed a "Manual for Evaluating the Invasiveness of Plants Introduced to Rivers" (draft, tentative title). It organizes the concept of prior assessment in introducing new species, points of attention in introduction and management, etc.

2. Outline of "Manual (draft)"

The "Manual (draft)" first organizes the concepts of

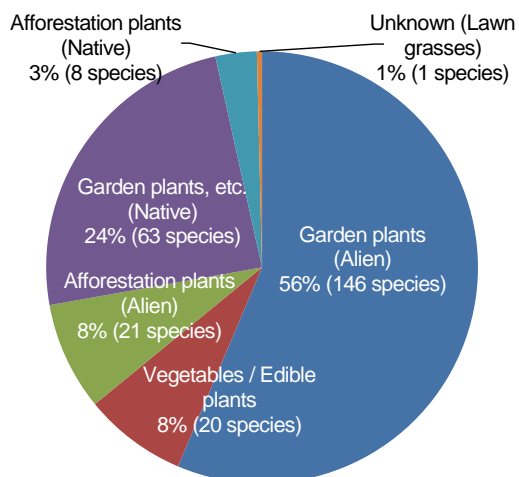


Figure: Number of Species of Herbaceous Plants Seeded / Grown in Japanese Rivers from 2005 to 2010

invasiveness including the necessity for considering it, and then introduces how to assess invasive risk including assessment methods in other countries. Furthermore, the Manual describes the species that warrant attention based on the results of the Census of Rivers and Riparian Areas, and points of attention in using garden plants and afforestation plants.

Ten percent of the introduced plants are said to escape to outer fields, and 10% of those species are said to settle and a further 10% of them are said to become invasive. Therefore, many of the alien plants used may not be invasive. However, even if the quantity of alien plants is very small at first, they are likely to increase enormously as time elapses. In such case, they are regarded as "invasive alien species," which escape and settle in the natural environment and adversely affect ecosystems and human activities. It will become very difficult to eradicate them if they expand across a wide area. It is, therefore, important not to use alien plants with high risk of escape and settlement from the beginning.

3. Publication of findings

The "Manual (draft)" will be released to the public as an NILIM document.

(<http://www.nilim.go.jp/lab/ddg/seika/>)

We hope that this material will contribute to alien species control measures at actual sites.



Photo: Example of Garden Plants Growing in Riverbed (Left: Verbena hybrida, Right: Forget-me-not)