

A study on the impact of high distribution of ground level in plant communities on the growth of *Phragmites australis* on Lake Biwa shore

Masahiro KAMADA

Keywords : ground level , Lake Biwa , *Phragmites australis* ,vegetation survey

1. Background and objective

Shiga Prefecture has been conducting planting project with the aim of reed community restoration for Lake Biwa shore. However, it is different between the natural reed communities and manmade ones. Ignoring regional vegetation only seed in as one of the problems of ground level one of the problems of ground high design possible. In this study “around Lake Biwa Yoshi in

2. Methodology

Lake Biwa coastal communities 131 lost communities lost 117.8 ha conducted a survey on the subject. Handheld GPS positioning system survey was used to collect information on ground level in the reed community. In addition, information about plants distributed in the ground level was obtained by phyto-sociological survey.

2. Results

Classify the vegetation using high ratio of soil from findings obtained in the research group to describe reed community structure and plant species composition and community characteristics.

(1)(Distribution: Broadband ground: low)

Colony off the coast of land width is narrow is a steep slope, ground elevation as showed a tendency to overgrowth of *Paspalum disticum* var *indutum*.

Often seen on the West coast and the South Lake4 especially Yamashita Bay 1-5 applied to this group.

(2) (Distribution: broadband and soil)

Vegetation slope is nearly constant, B.S.L. -110 to 30 cm. Through canopy had spread to far from the land equal.

inclination and widely distributed. Species such reed, reed-kasaskge, reed-makomo formed the colony. Especially the present many North West Bank of the Lake. Aiba 2-4 of vegetation applied to this group.

(3) (Distribution: broadband and ground high) Higher ground elevation B.S.L. -50 cm of canopy spread thickly ogi, seitakawadachisou, kuzu, B.S.L. -50 cm low density of mizu yoshi. Centered in much deeper part of the vegetation there. Many present on the northern coast of Lake new seaside 3,4 white3 kingtown 1 of vegetation applied to this group.

(4) (Distribution: iside and soil: high)

Applied many shallow shelf canopies, beach crest exists off chikugosuzumenohie, slightly inland, kasasuge, makomo, ukiyagara etc. were present. More present on the northern coast of Lake imanishi 14, shiotsu Beach 1-3 of vegetation applied to this group.

(5) (Distribution: inside and soil: while)

Narrow distribution range of the soil,. Planting vegetation the applied to this group. Had a tendency to different vegetation communities across, yoshi, high ratio of chikugosuzumenogie identified some. Many present planting vegetation on the Eastbank of the South Lake at hamakita 1 exited in this group.

(7) (Distribution: narrow-soil: inside)

Fisheries Department planted a “lap field” planting vegetation type applies to the B.S.L. -30 cm to – 50 cm. The communities concentrated on high ground. About Yoshi diversity index, number of occurrences of lower with only vegetation. Shimokasa12 communities are favored to this group.

