

Humphrey Davy's dictum that salmon and trout will do so, but the fastidious grayling cannot do so, it is possible that the variety of fishes capable of acclimatisation in saline, alkaline or other waters may be considerable. The sticklebacks, while normally frequenting fresh water, except *G. spinachia*, flourish in brackish water, and in shore pools reached by high tides. The marine flat-fishes, the flounder, &c., are found up rivers far from the sea, while the striped bass has been successfully retained for years in fresh water, but the climax is reached in that paradoxical fish, the blenny of Ceylon and the Celebes, which habitually lives on damp rocks, leaping from one to the other, and shunning the water to avoid being drowned! *Periophthalmus*, as it is called on account of its projecting eyes, leaps, when pursued, like a frog. and, as Dr. Günther says, seems to "prefer escaping in that way to swimming beneath the surface."

The plasticity and adaptability of various fishes to new surroundings is not only a matter of peculiar biological interest, it is of eminent practical importance. Hence the brief sketch which I have prepared has been amplified and in a somewhat detailed form will appear as a special report in the forthcoming Blue Book of the Fisheries Department to be laid before Parliament at the approaching session. The subject is one needing fuller investigation. If barren waters remote from the sea, and unfavourable, from conditions of temperature, alkalinity, and the like, for indigenous inland species, can be stocked with fine species of fish, marine or brackish in their habitat, the possibility of conferring immense benefit upon the public becomes plainly apparent. From our present fragmentary knowledge it may be surmised that no small number of species have such powers of endurance as to facilitate the work of acclimatization.

---