**SUPPLEMENTARY FIGURES**



**Figure S1.** In 1939 (month unknown), Oneura (1), Otehei (2) and Sunset (3) bays appear to be without subtidal seagrass (red circles); Kapuharahurahu (4) is not well-enough in view; but – although the angle is very oblique - there could be seagrass present in Urupukapuka Bay (5) (National Library reference WA-03197-G & WA-03198-G).



**Figure S2**. In 1947 (month unknown), no subtidal seagrass is unambiguously obvious in any of Urupukapuka’s western bays (red circles). (National Library reference WA-04655-F *&* WA-04659-F)

C:\Users\John\Documents\New General\Seagrass\Figures, maps etc\Boundary Hauai&Kaimarama_1959_2791_2_with arrows.tif

**Figure S3.** Extensive seagrass (arrows) between and within the Kaimarama (upper left) and Hauai (lower right) bays in spring 1959 (NZ Aerial Mapping Ltd SN1223 2791-2, with the boundary used in this study indicated by black line).

*C:\Users\John\Documents\New General\Seagrass\Motuarohia Overview sequence\Motarohia_~1950s_cropped annotated.png*  * *

**Figure S4.** Some one-off oblique images were useful. On Motuarohia, Otarepo Bay apparently lacked seagrass in the late-1950s (upper left, the dark area on left of bay being kelp associated with reef; seagrass had clearly established by January 1973 (upper right; National Library reference WA-71219-G); it appears to have expanded by February 1987 (lower left; National Library reference 1434804); and to have covered much of the length of the bay by November 2011 (lower right; Salt Air Paihia 110, there no longer being subtidal kelp associated with the reef at left, and the bilobal-shape of the seagrass bed having been brought about by boat-manoeuvring near the end of the jetty).

**A**

**B**

**C**

**D**

**E**

**F**

**G H**

**I**

**J**

**Figure S5.** Graphs illustrating associations between the factors listed in Table 1.