

Figure Legends

Figure 26. Mean percent survival for A) Large and B) Small surfclams in experimental units of two sizes at Grand Marsh Bay, Gouldsboro, Maine (1-2 December 2021). Experiment was initiated on 27-28 March 2021 (250 days). ANOVA indicated a significant difference in survival between unit sizes for both sizes of clams (Tables 1 & 3; $P < 0.0001$). $n = 30$

Figure 27. Effects of stocking density on mean percent survival (+ 95% CI) of large surfclams in experimental units at Grand Marsh Bay, Gouldsboro, Maine from 27-28 March to 1-2 December 2021. ANOVA indicated that the mean decrease in mean survival between the lowest density and the two highest densities (~30%) was not statistically significant ($P = 0.052$; Table 1). $n = 20$

Figure 28. Size-frequency distribution of initial and final sizes of large, live surfclams recovered from experimental units on 27-28 December 2021 at Grand Marsh Bay, Gouldsboro, Maine.

Figure 29. Size-frequency distribution of initial and final sizes of small, live surfclams recovered from experimental units on 27-28 December 2021 at Grand Marsh Bay, Gouldsboro, Maine.

Figure 30. Effects of stocking density on mean absolute growth of small Arctic surfclams at Grand Marsh Bay, Gouldsboro, Maine (27-28 March to 1-2 December 2021). Absolute growth was depressed by ~13% at the highest density compared to the lowest two densities. $n = 20$

Figure 31. Size-frequency distribution of green crabs in experimental units at Grand Marsh Bay, Gouldsboro, Maine on 1-2 December 2021. $N = 686$

Figure 32. Relationship between green crab carapace length and percent survival of A) small surfclams ($P = 0.6145$), and B) large surfclams ($P = 0.0293$; $Y = 16.5 + 0.403X$, $r^2 = 0.0793$). Black line is the regression line and blue lines represent the 95% CI around the fitted line. $n = 60$

Figure 16. Photos of the contents of two experimental growout boxes taken on 10 September 2021 at Grand Marsh Bay, Gouldsboro, Maine. A) A 1-ft x 2-ft box filled with muddy sediments. Initially (27-28 March 2021), ~2-inches of play sand were added to each 6-inch deep box so that surfclams would have a substrate to burrow into. B) A 1-ft x 2-ft growout box with many dead surfclam juveniles with dead, undamaged valves (shells). The black spots are areas of anoxia where clams have died within a few days of taking the photo. C) The top of the box from photo B. This was a 2-inch top and it was choked with muddy sediments that did not permit adequate seawater circulation/exchange between the overlying water column and the animals in the growout box. The flexible mesh that is torn away from the wooden frame enabled the mud that had built-up between the bottom and top of the frame to be excavated and placed on the adjacent mudflat. Box tops from all 60 boxes were removed temporarily, and any mud occurring between the top and bottom meshes of each frame was excavated as shown in this photo.

Figure 26.

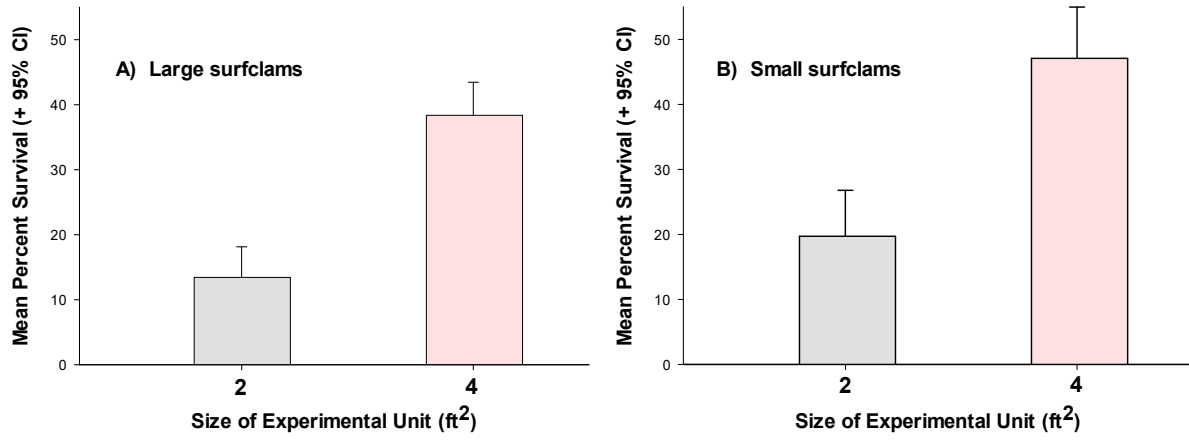


Figure 27.

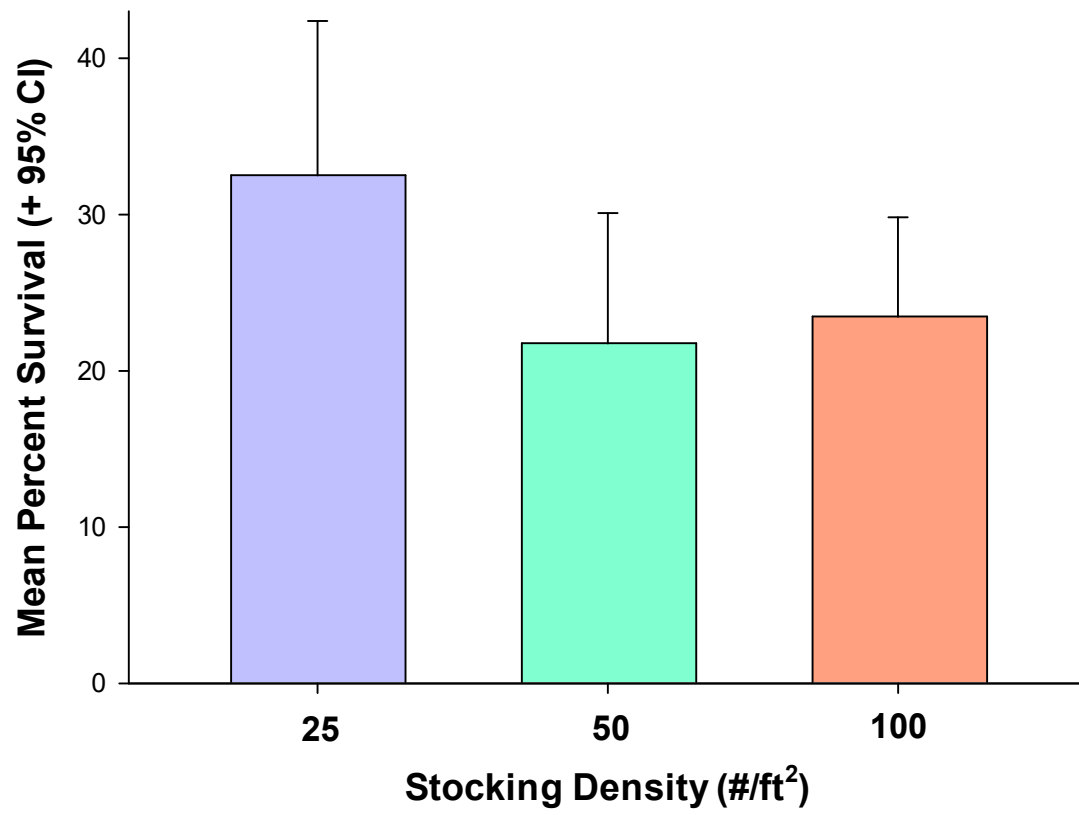


Figure 28.

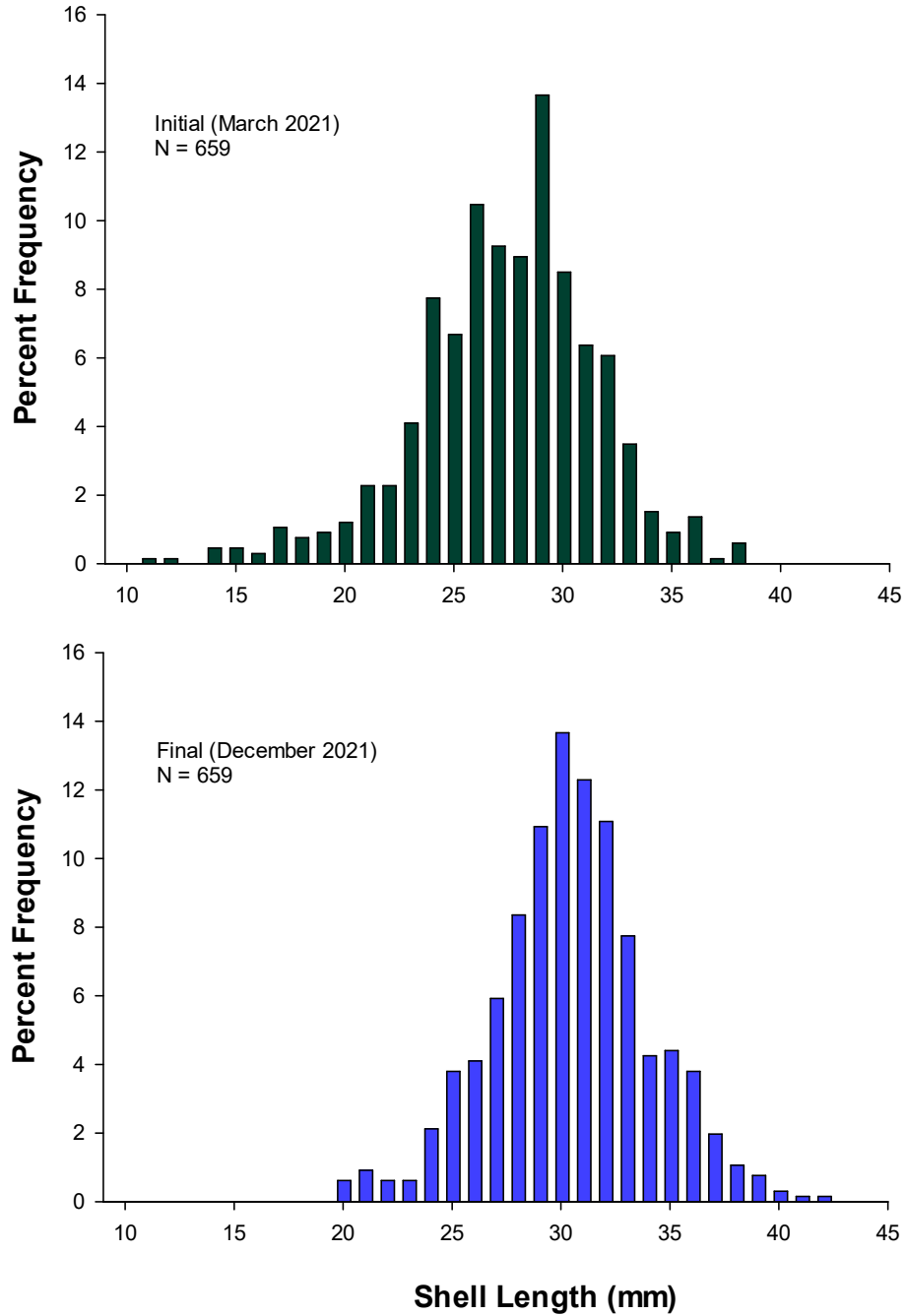


Figure 29.

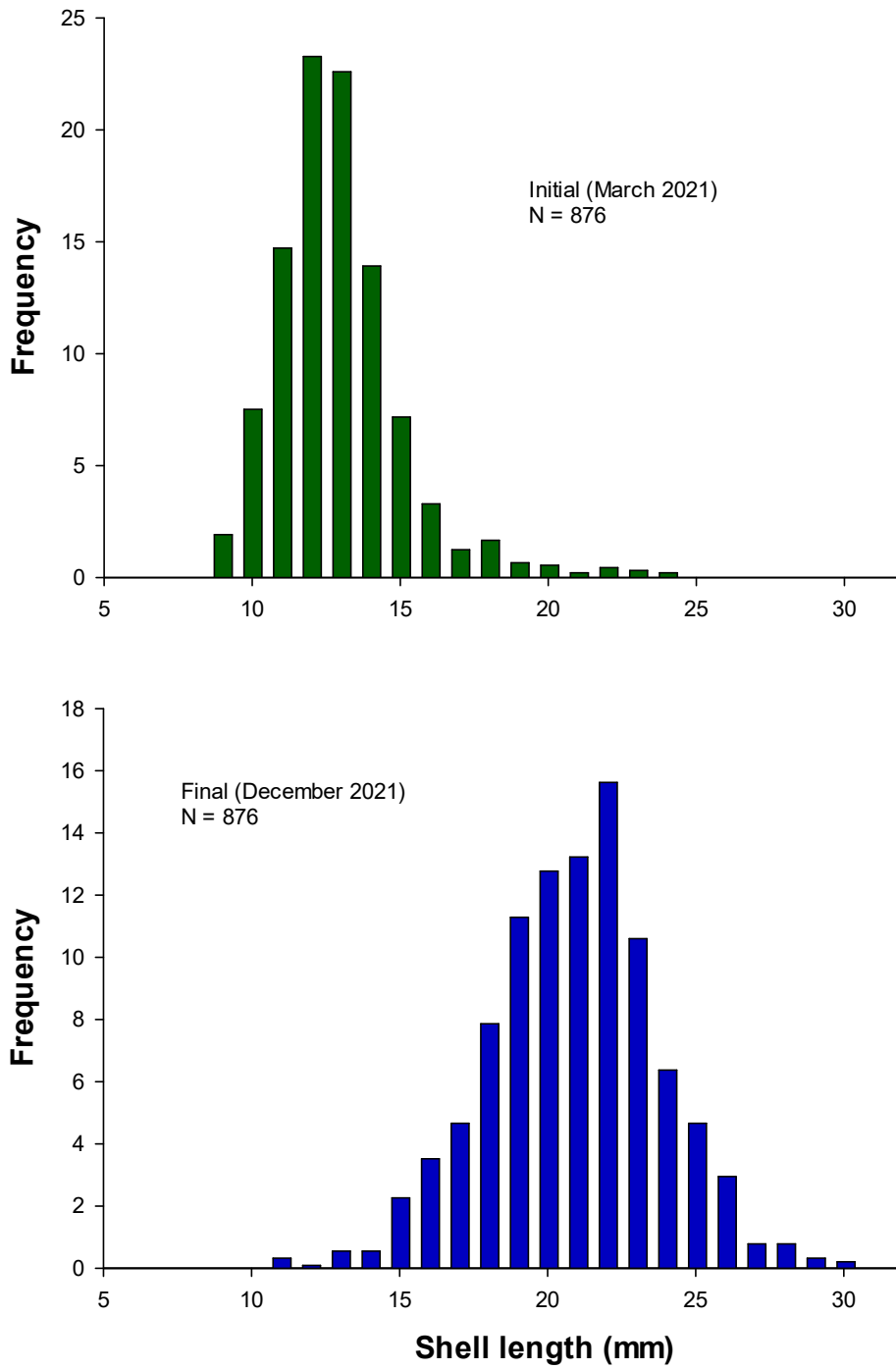


Figure 30.

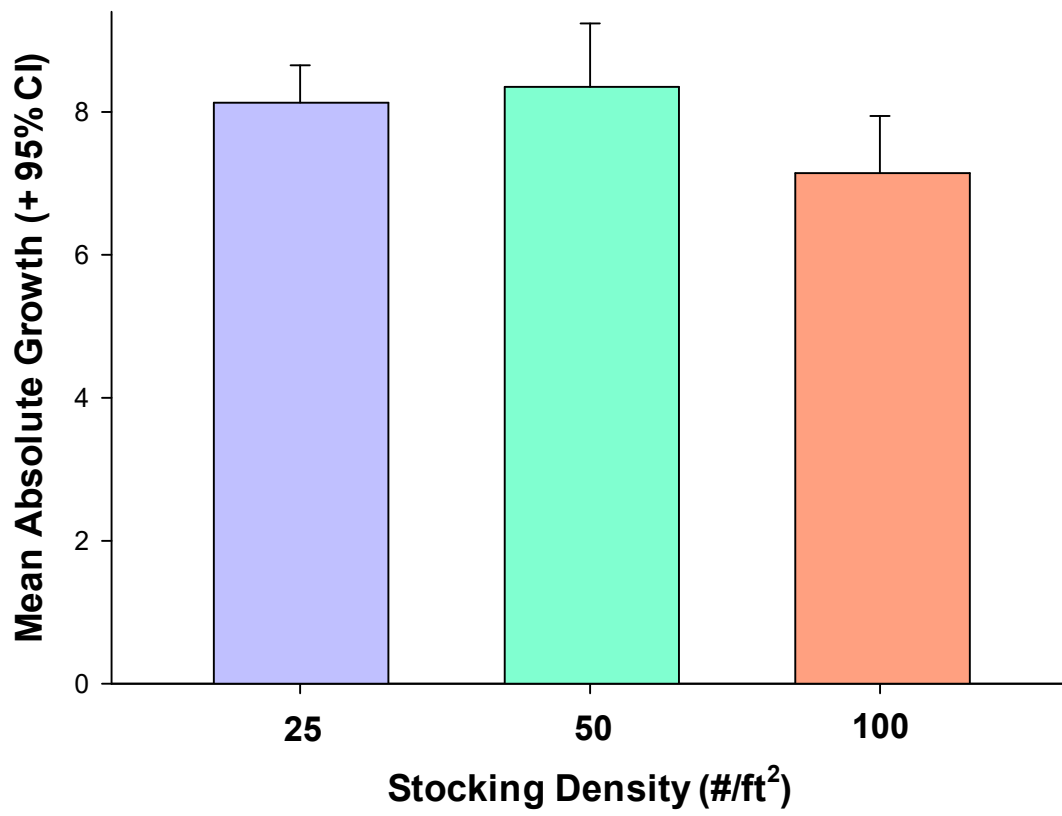


Figure 31.

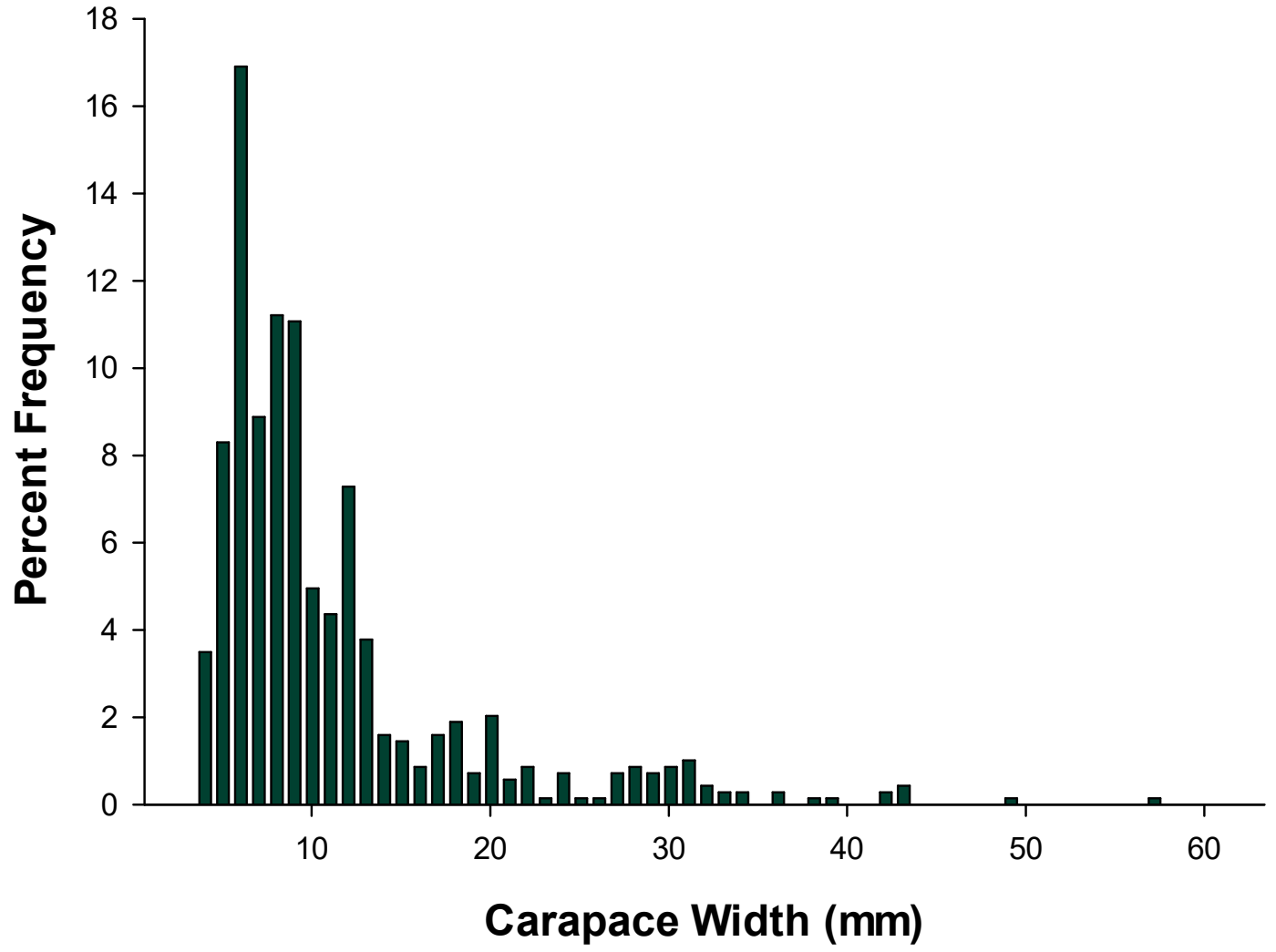


Figure 32.

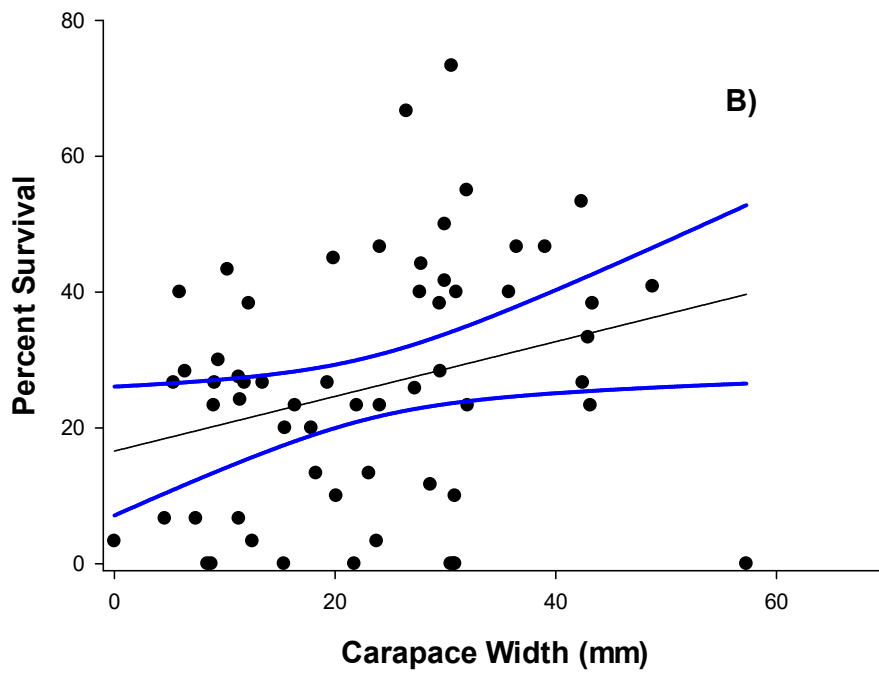
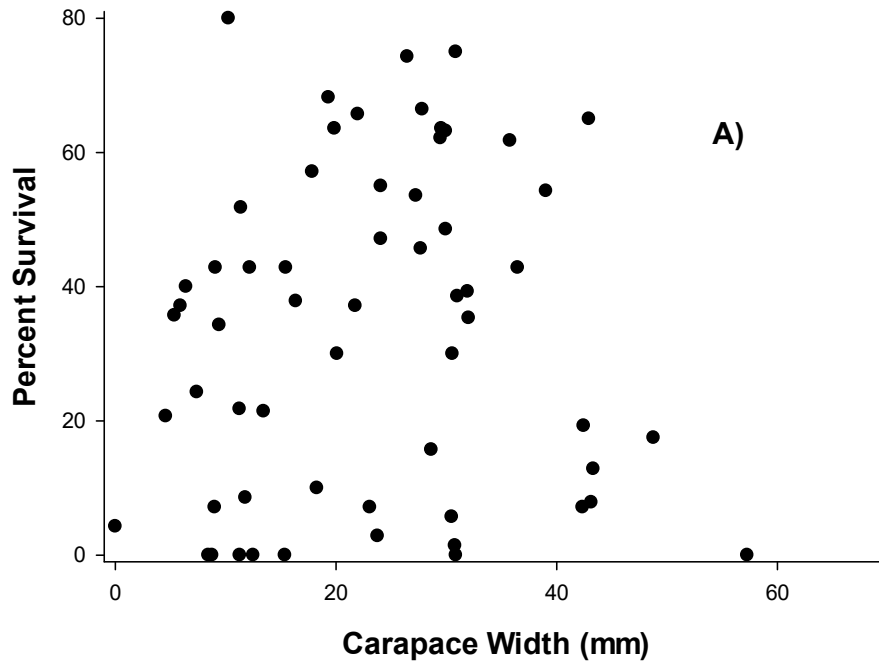


Figure 33.

