# Supplementary material

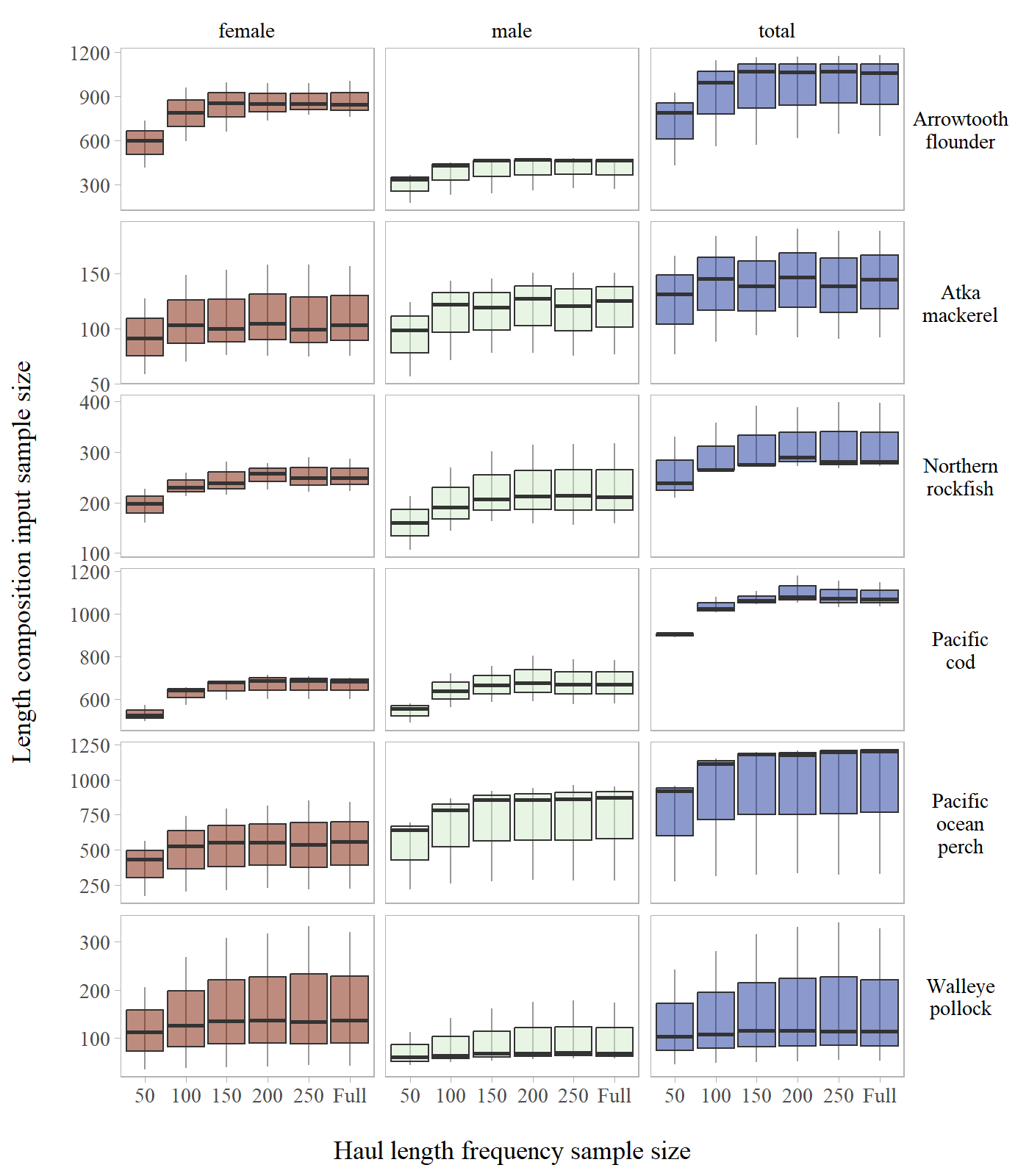


Figure S1: Annual length composition input sample size by stock across haul length frequency sub-sampling levels evaluated for the Aleutian Islands.

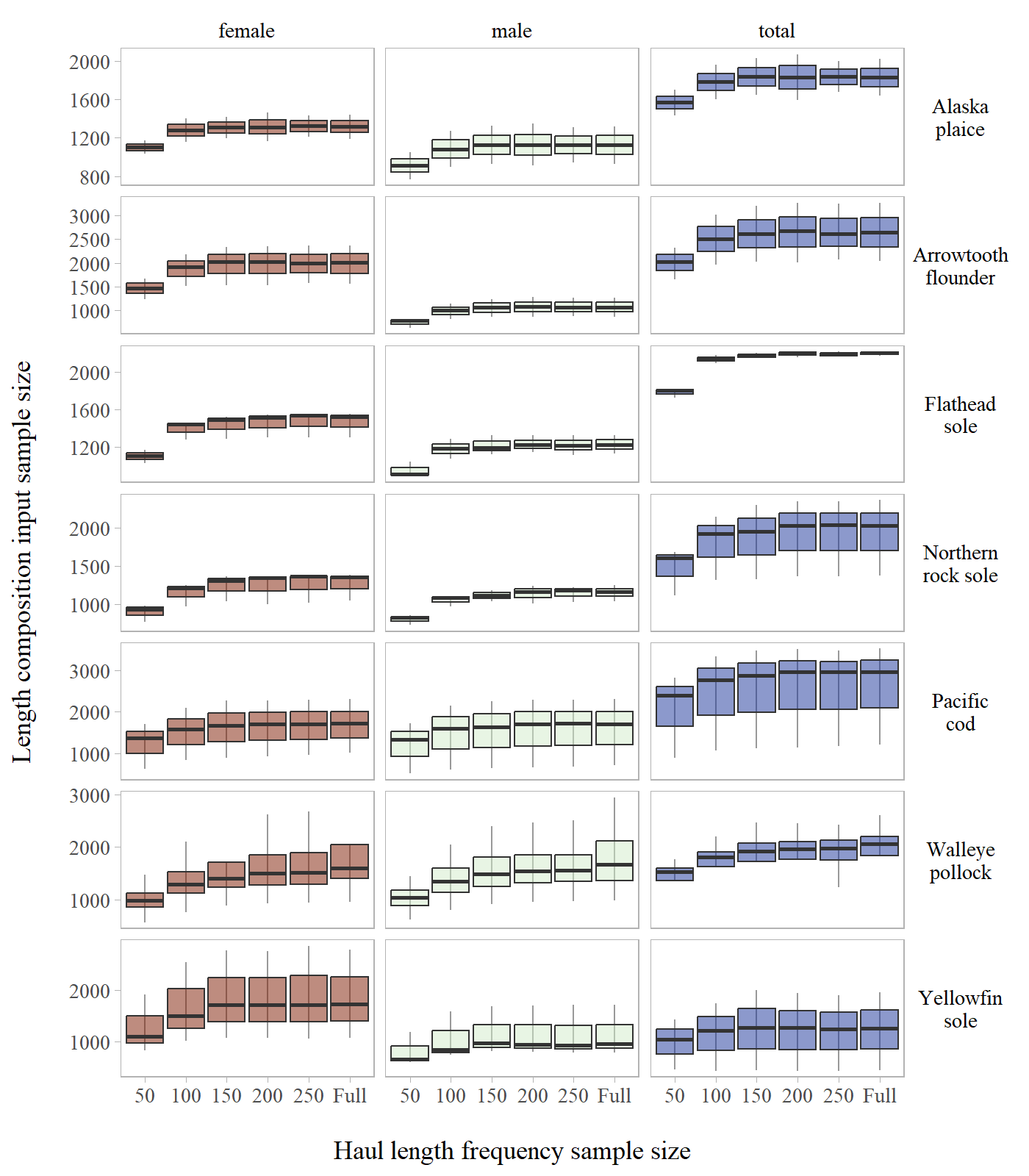


Figure S2: Annual length composition input sample size by stock across haul length frequency sub-sampling levels evaluated for the Eastern Bering Sea Shelf.

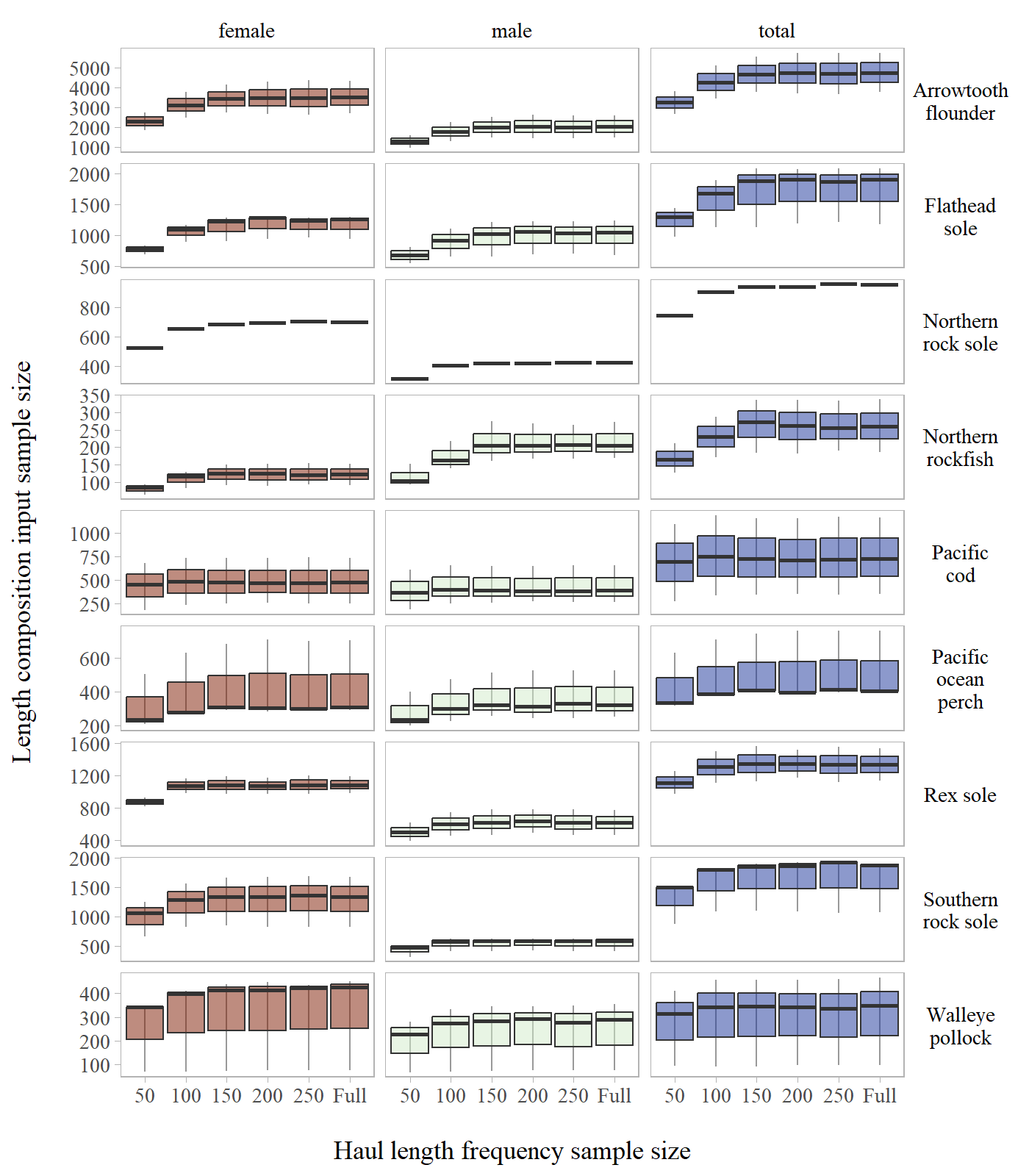


Figure S3: Annual length composition input sample size by stock across haul length frequency sub-sampling levels evaluated for the Gulf of Alaska.

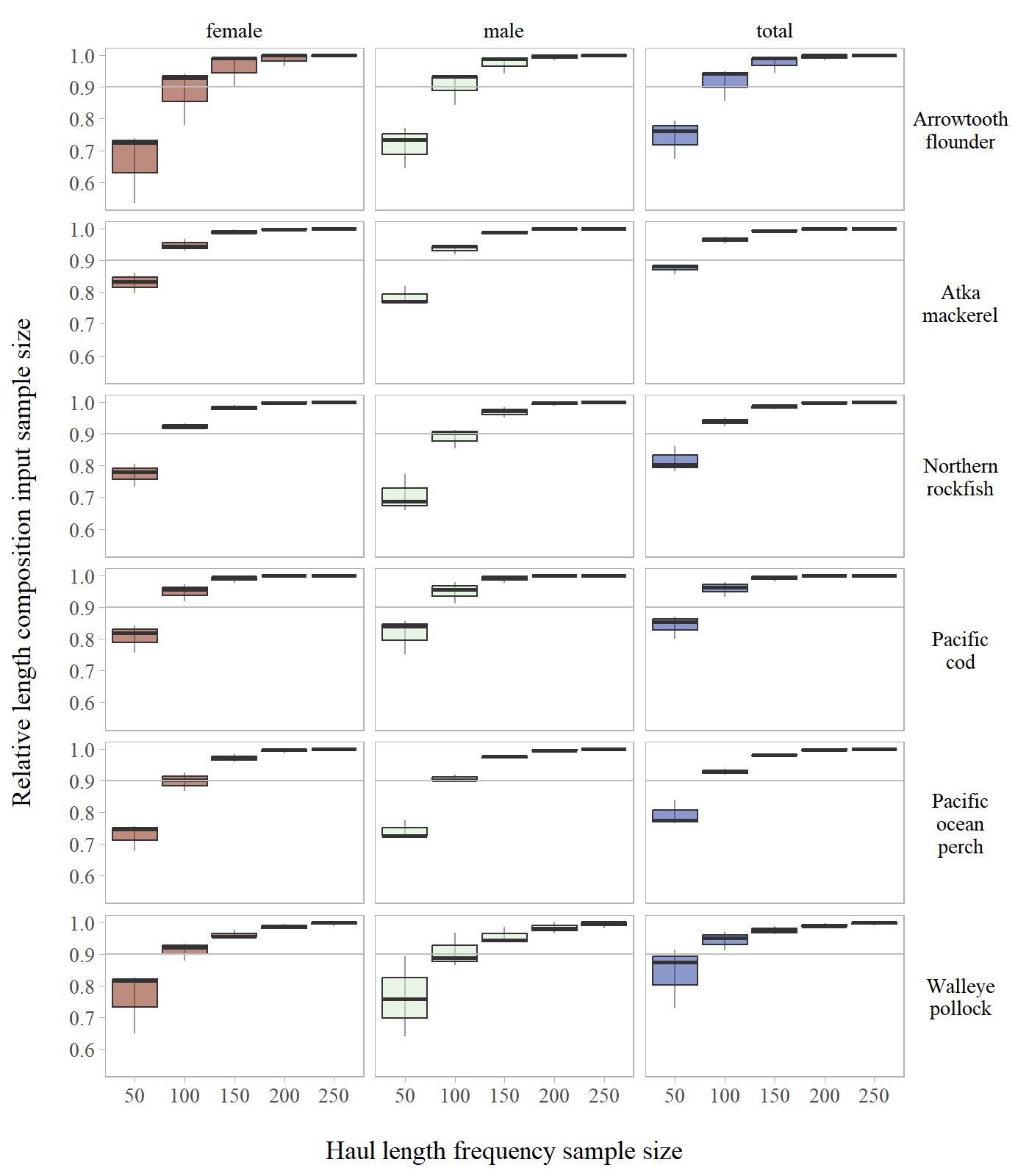


Figure S4: Annual length composition relative input sample size by stock across haul length frequency sub-sampling levels evaluated for the Aleutian Islands.

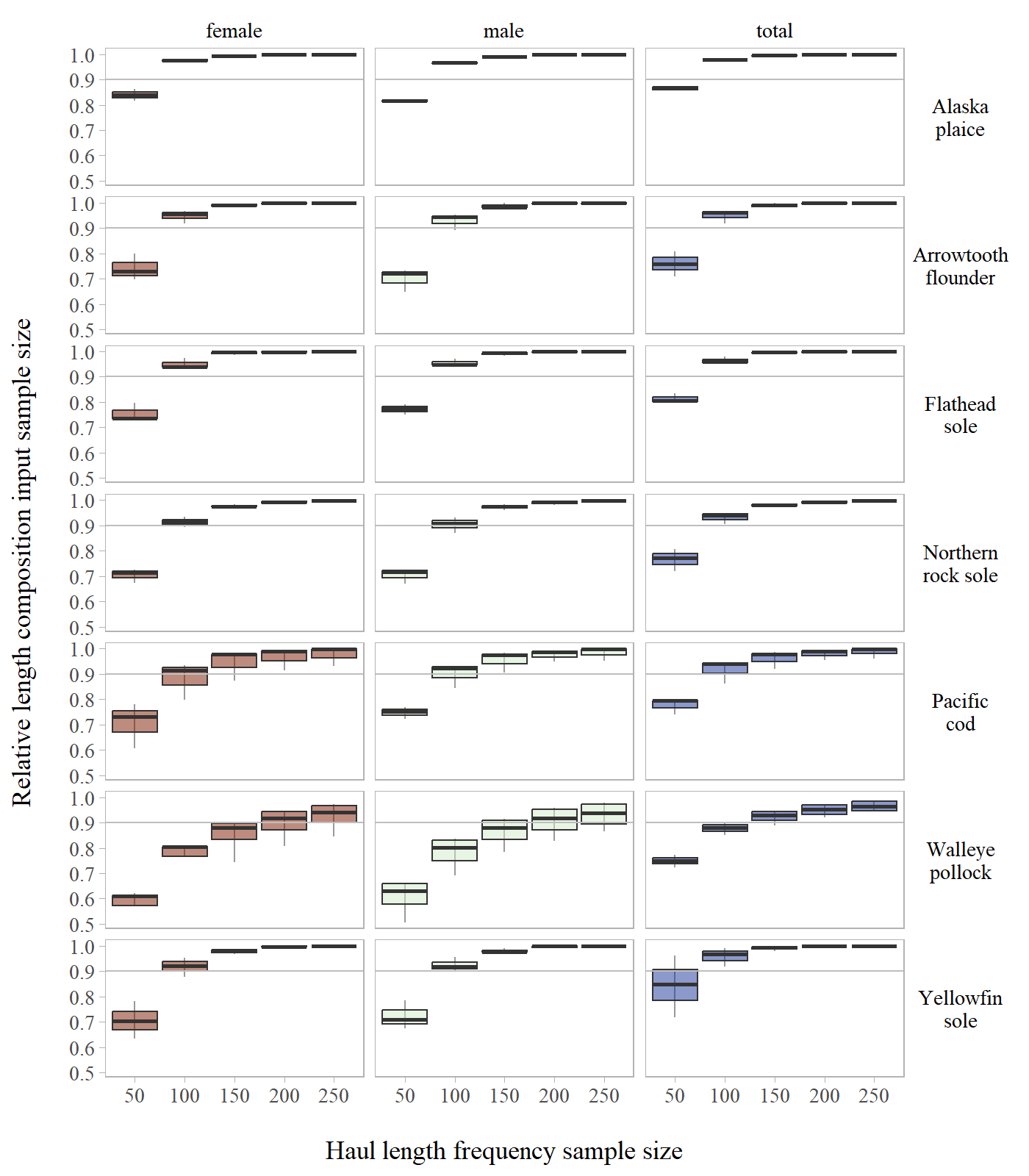


Figure S5: Annual length composition relative input sample size by stock across haul length frequency sub-sampling levels evaluated for the Eastern Bering Sea Shelf.

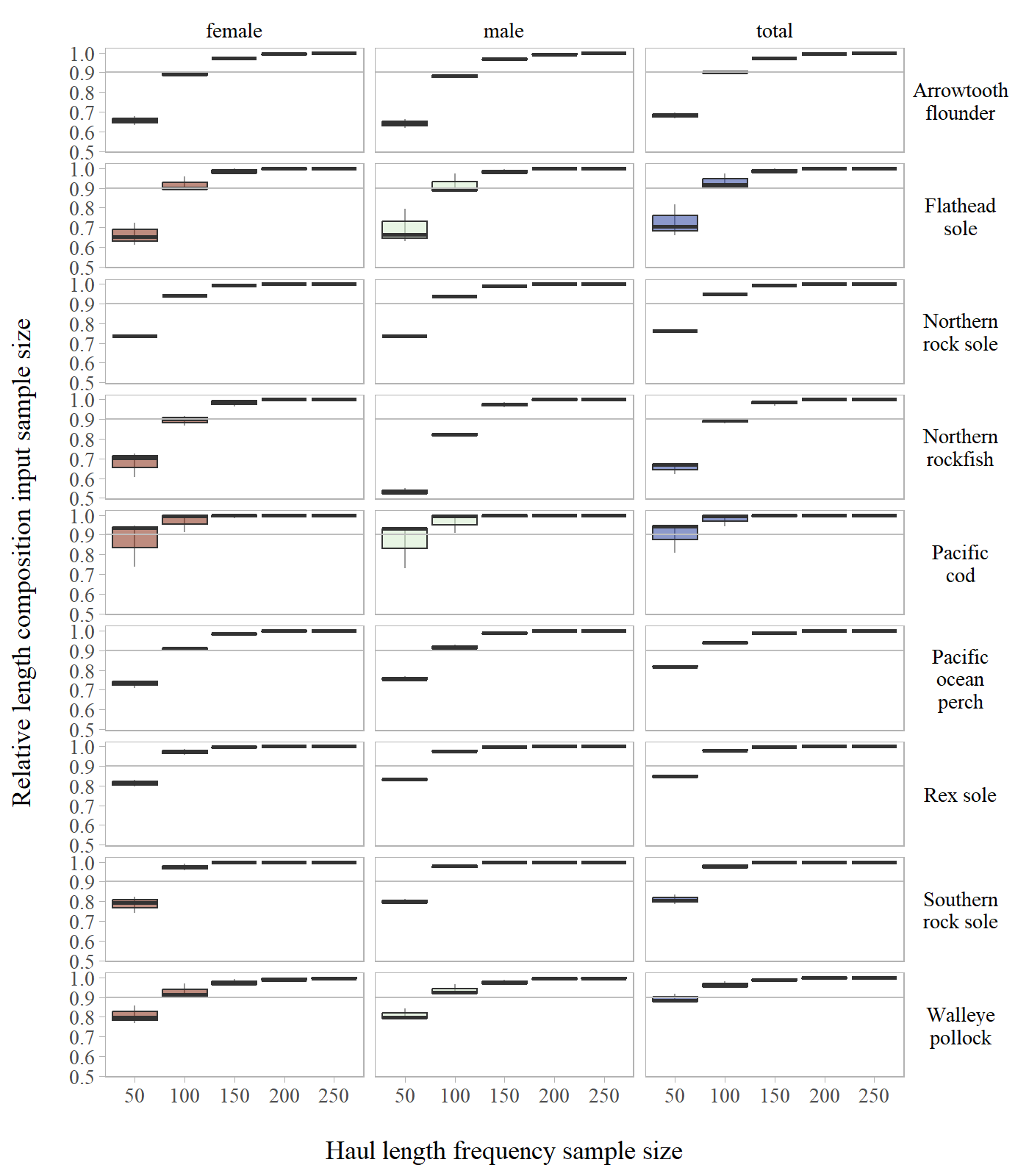


Figure S6: Annual length composition relative input sample size by stock across haul length frequency sub-sampling levels evaluated for the Gulf of Alaska.

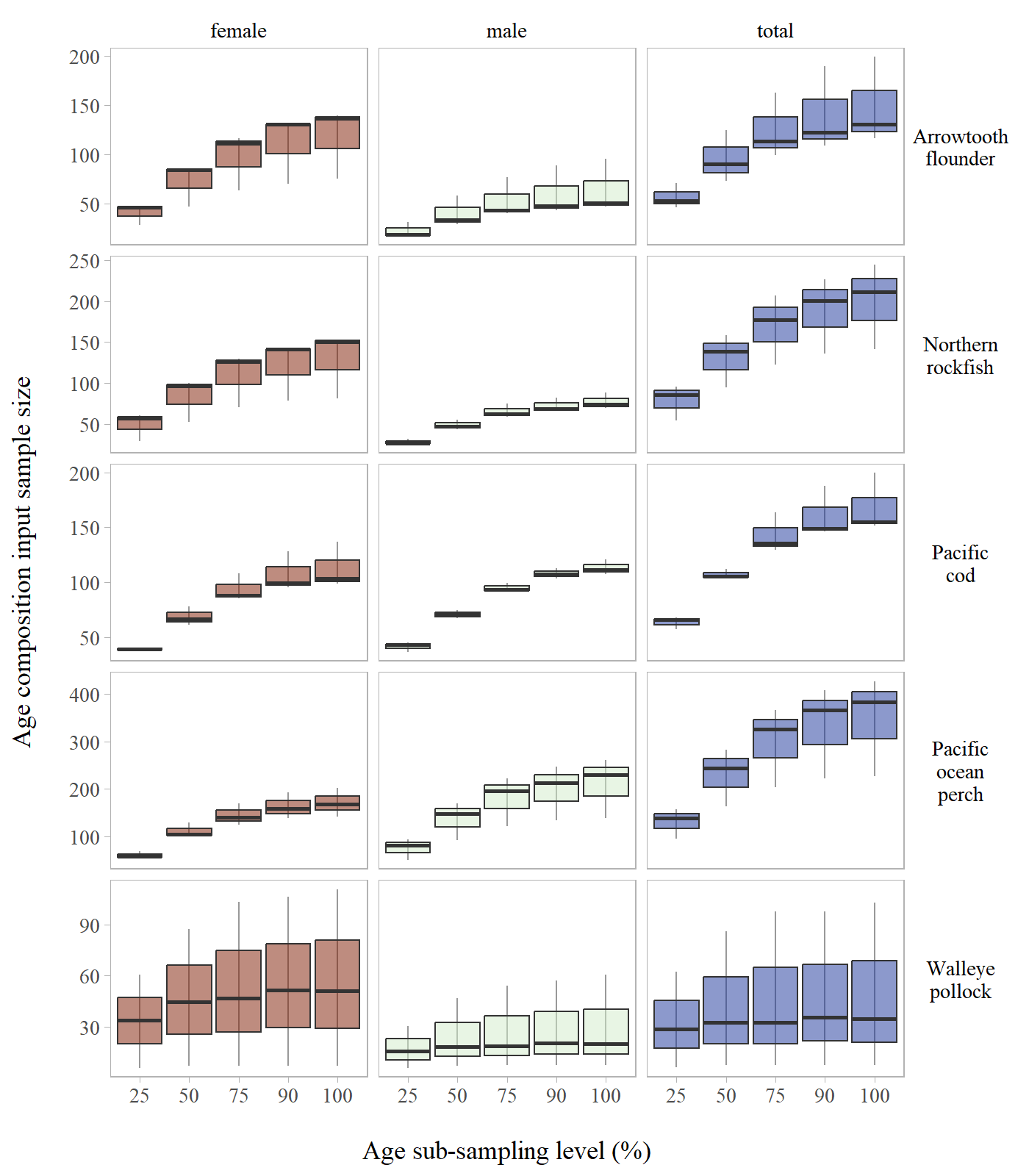


Figure S7: Annual age composition input sample size by stock across age sub-sampling levels evaluated for the Aleutian Islands.

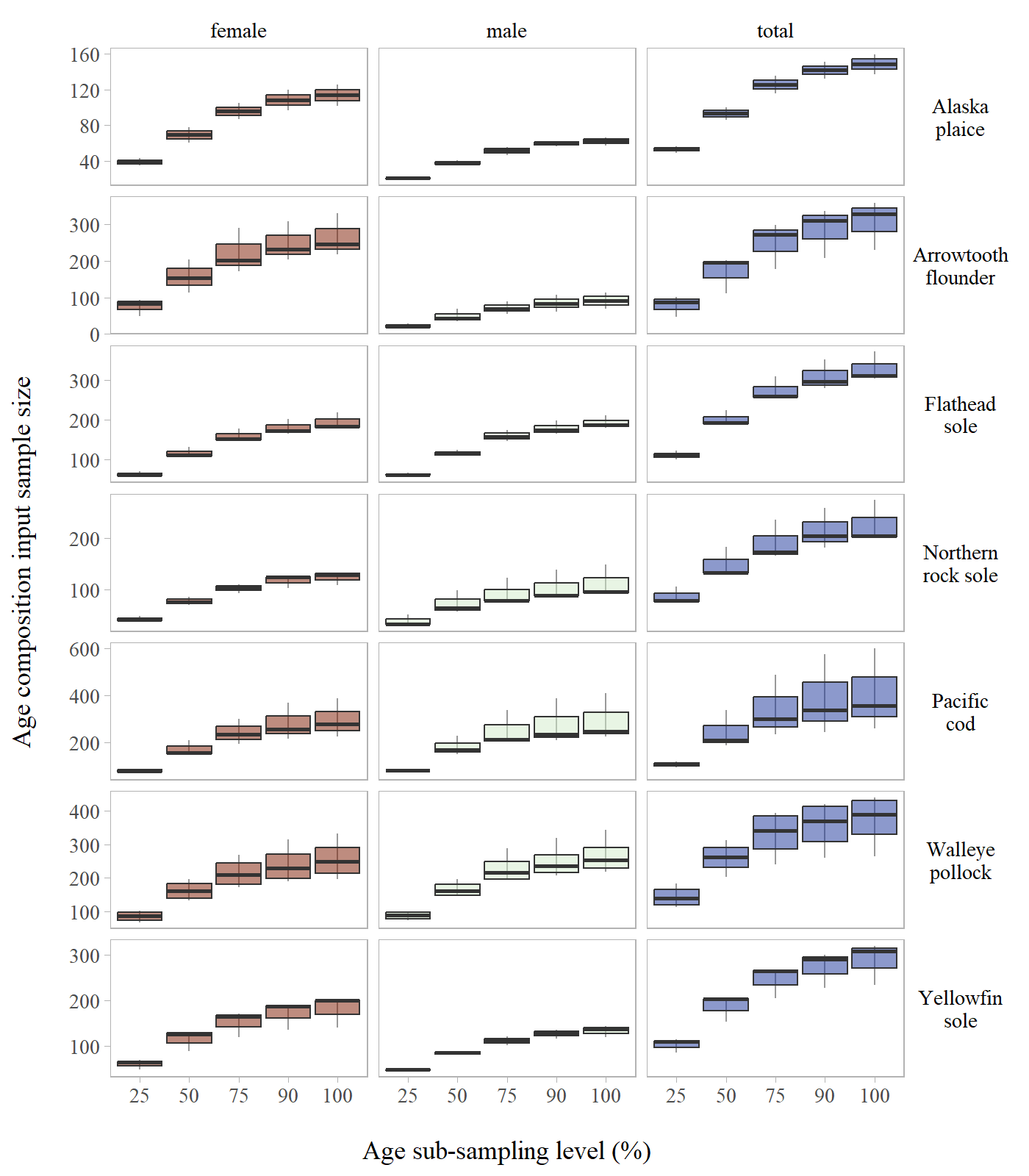


Figure S8: Annual age composition input sample size by stock across age sub-sampling levels evaluated for the Eastern Bering Sea Shelf.

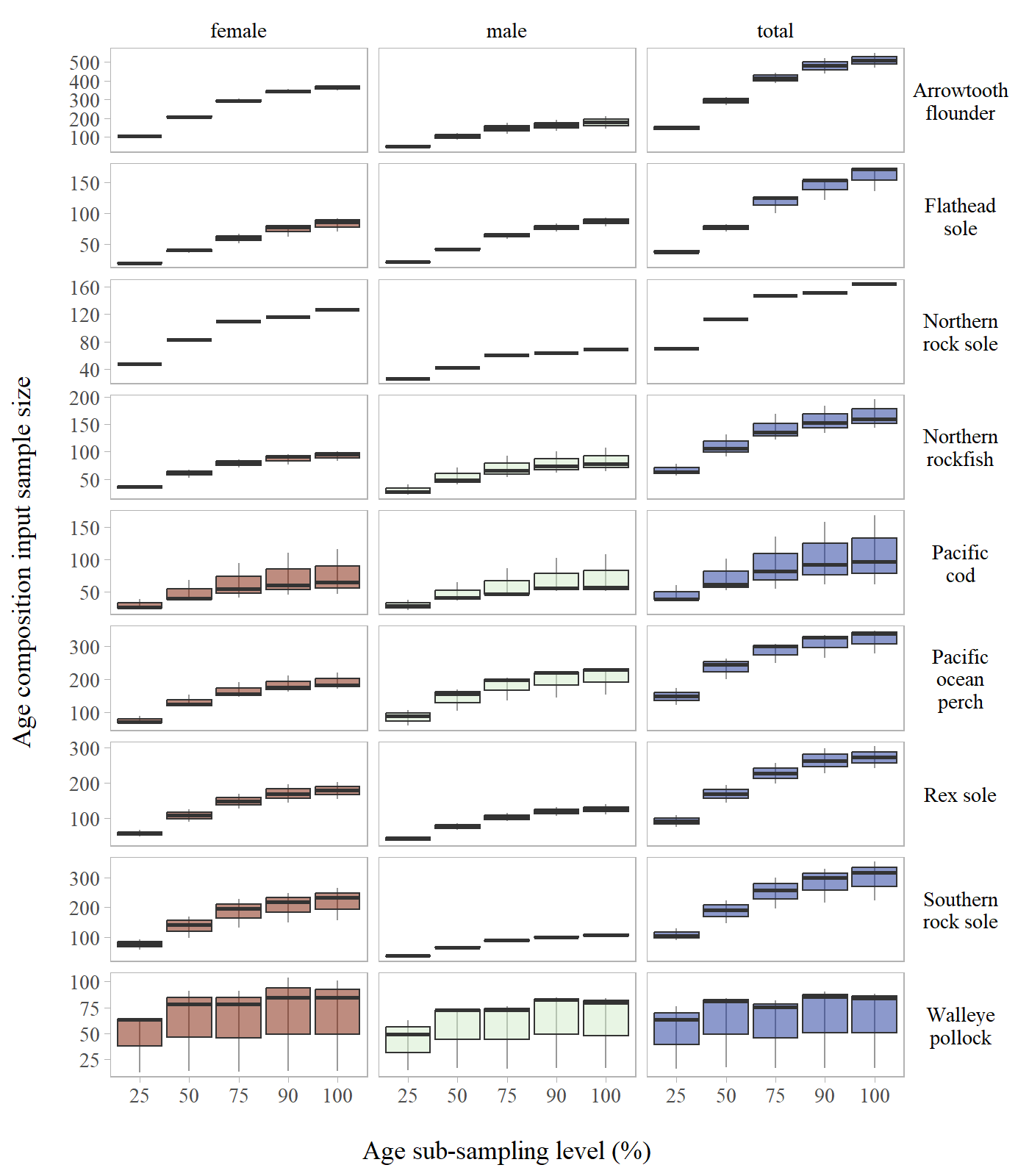


Figure S9: Annual age composition input sample size by stock across age sub-sampling levels evaluated for the Gulf of Alaska.

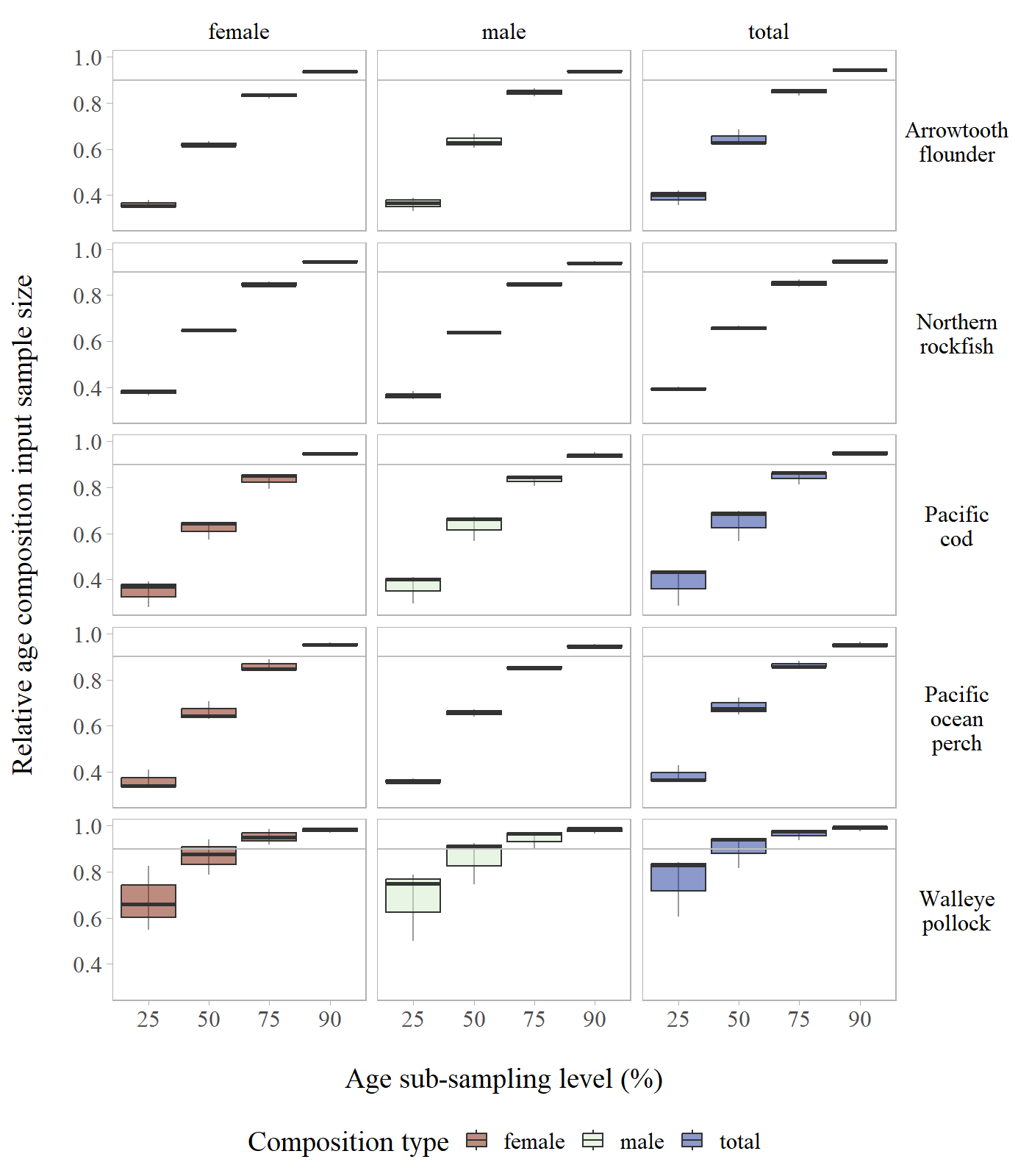


Figure S10: Annual age composition relative input sample size by stock across age sub-sampling levels evaluated for the Aleutian Islands.

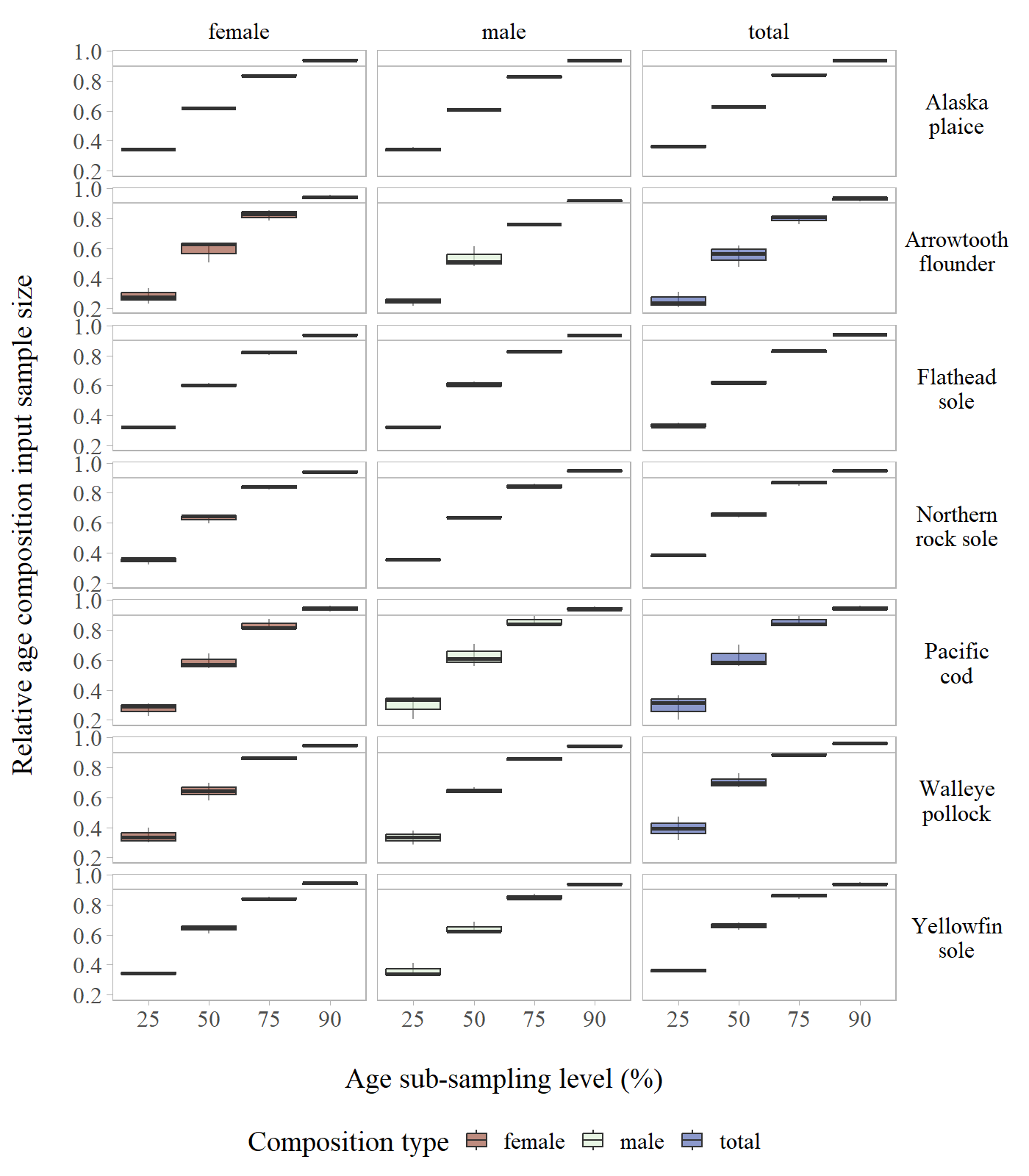


Figure S11: Annual age composition relative input sample size by stock across age sub-sampling levels evaluated for the Eastern Bering Sea Shelf.

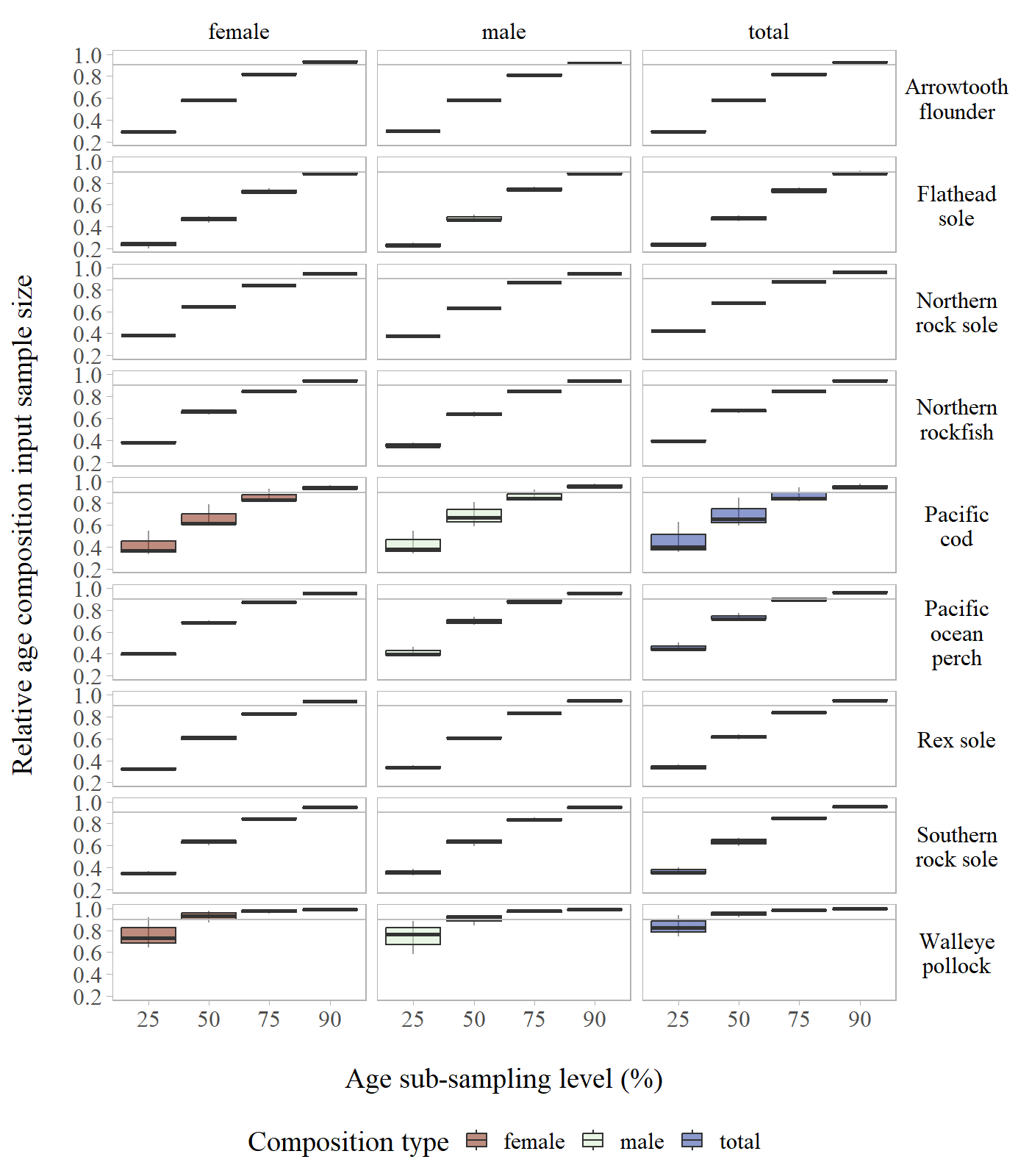


Figure S12: Annual age composition relative input sample size by stock across age sub-sampling levels evaluated for the Gulf of Alaska.