

**Appendix C. Ecological response functions.** This appendix contains all of the ecological response functions used in the integrated modeling. Ecological response functions predict the health response (y-axis) of each ecological component on a scale from 0 – 1 as a function of environmental flow where 0 indicates intolerable habitat conditions and 1 indicates ideal conditions. The source of the ecological response functions including all modifications are specified in Appendix A.

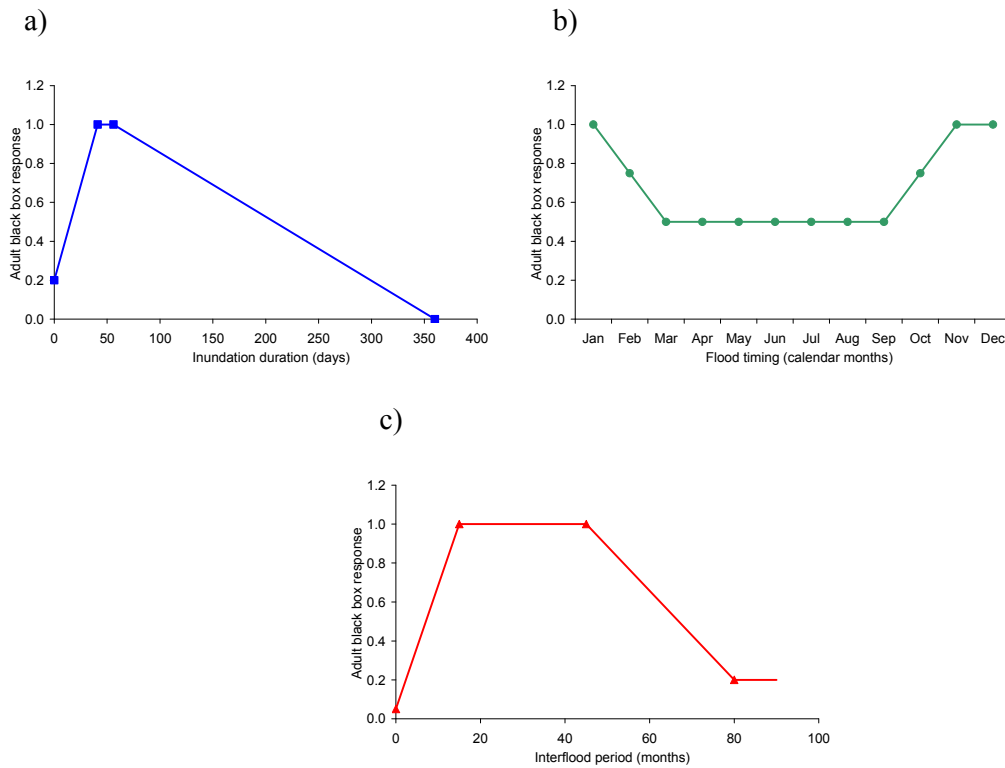


FIG. C1. Response of adult black box to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

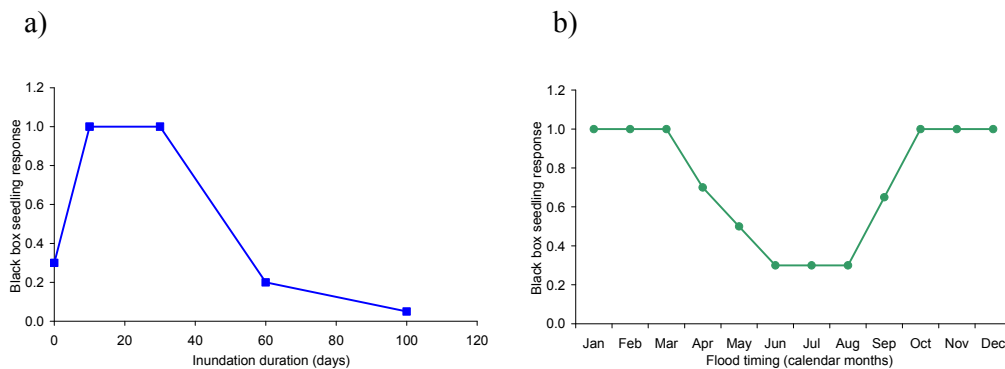


FIG. C2. Response of black box seedlings to: (a) flood duration (days); and (b) flood timing.

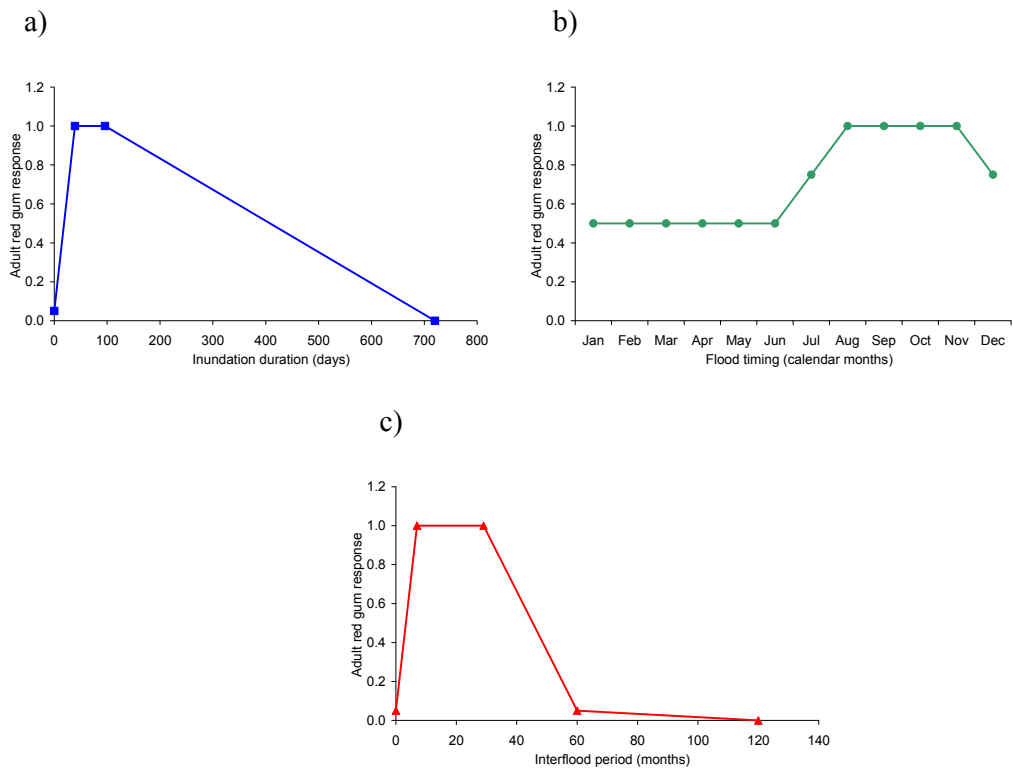


FIG. C3. Response of adult floodplain river red gums to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

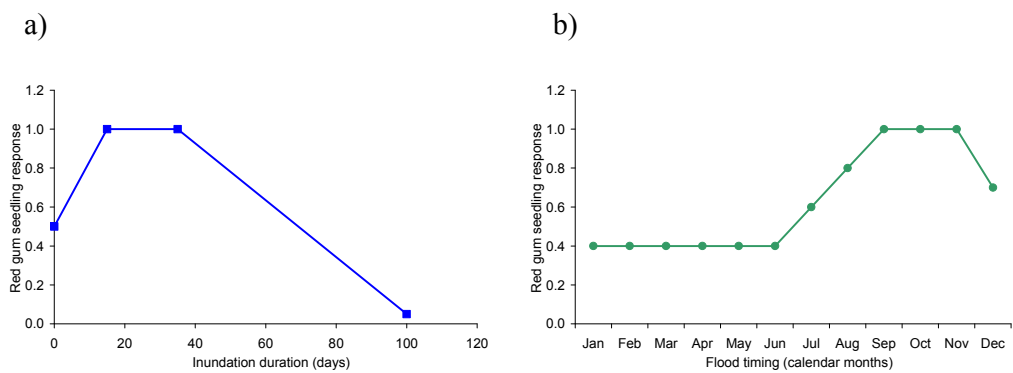


FIG. C4. Response of floodplain river red gum seedlings to: (a) flood duration (days); and (b) flood timing.

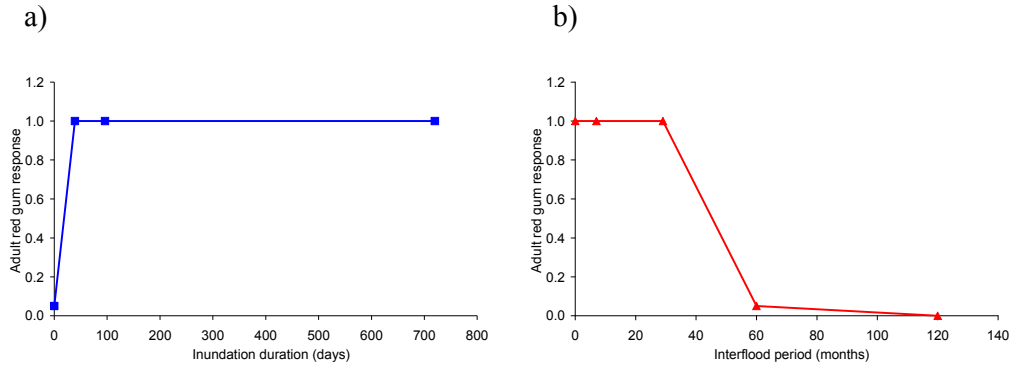


FIG. C5. Response of adult riparian river red gums to: (a) flood duration (days); and (b) interflood period (months).

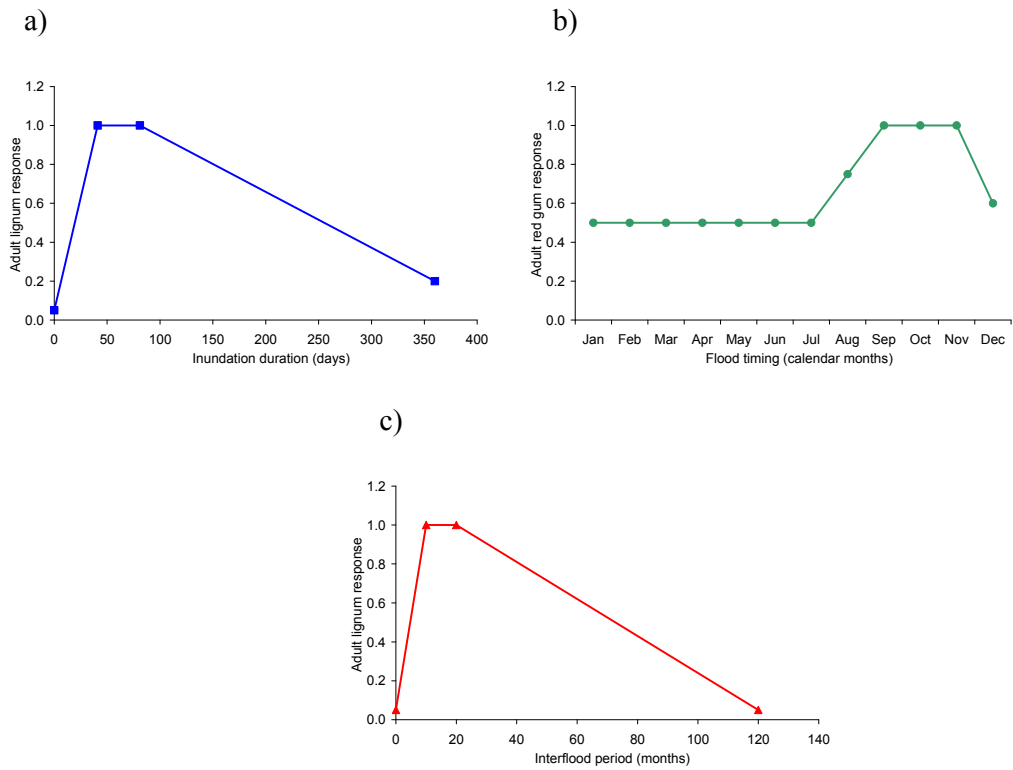


FIG. C6. Response of adult lignum to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

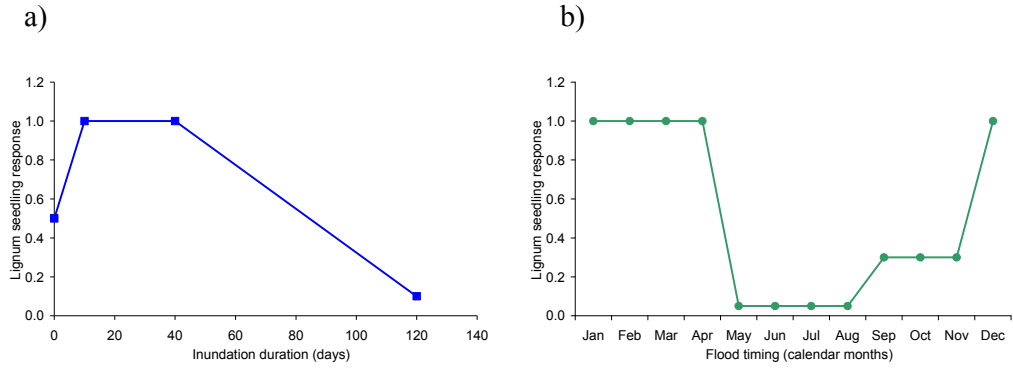


FIG. C7. Response of lignum seedlings to: (a) flood duration (days); and (b) flood timing.

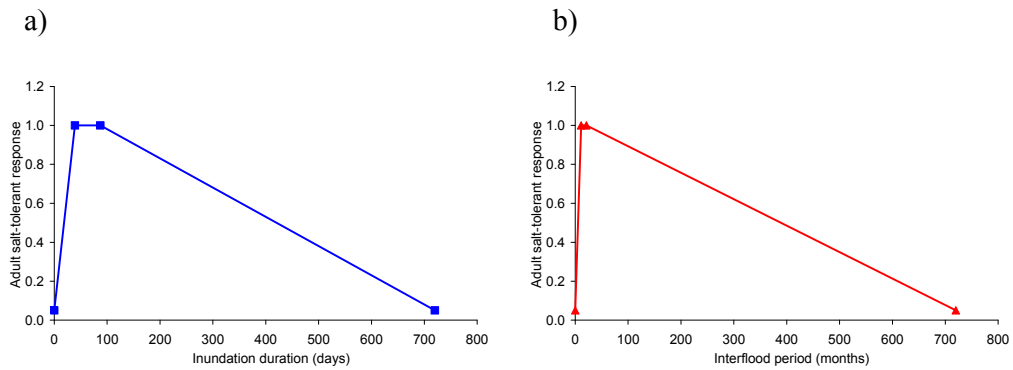


FIG. C8. Response of adult salt-tolerant vegetation to: (a) flood duration (days); and (b) interflood period (months).

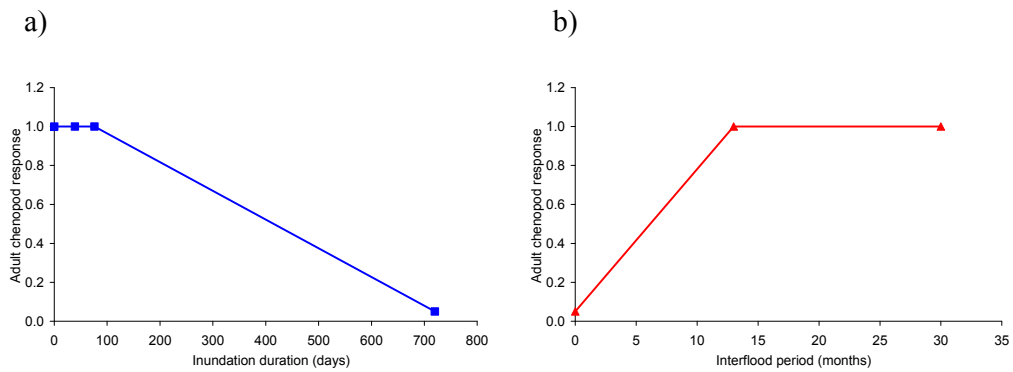


FIG. C9. Response of adult chenopods to: (a) flood duration (days); and (b) interflood period (months).

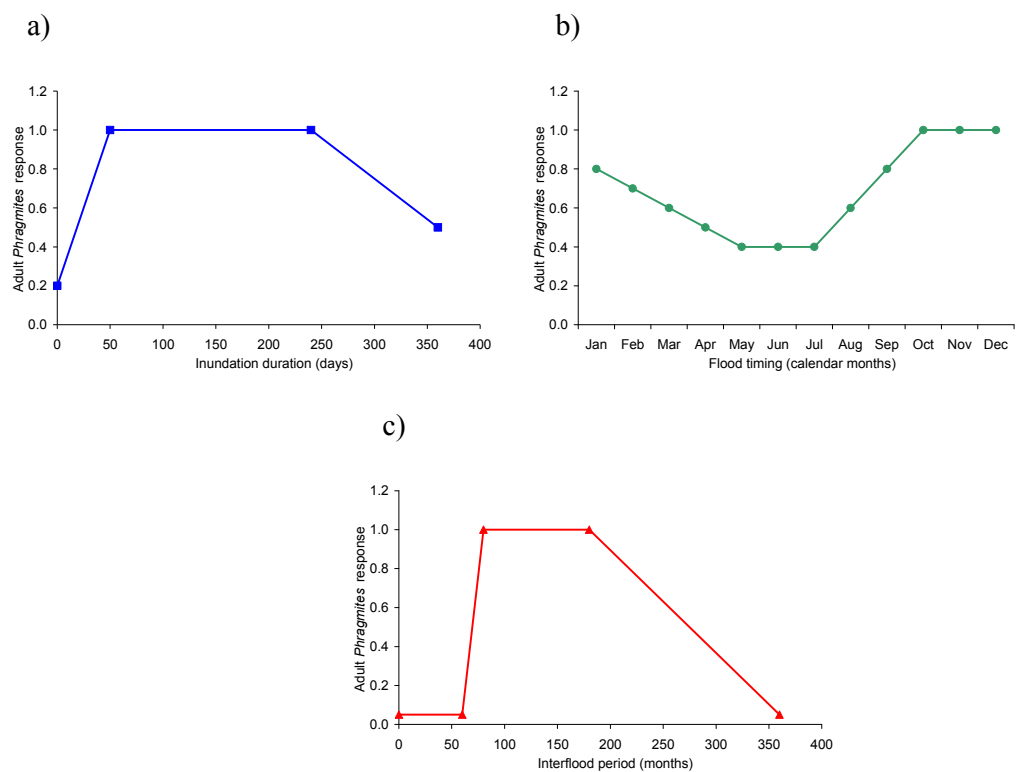


FIG. C10. Response of adult *Phragmites australis* to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

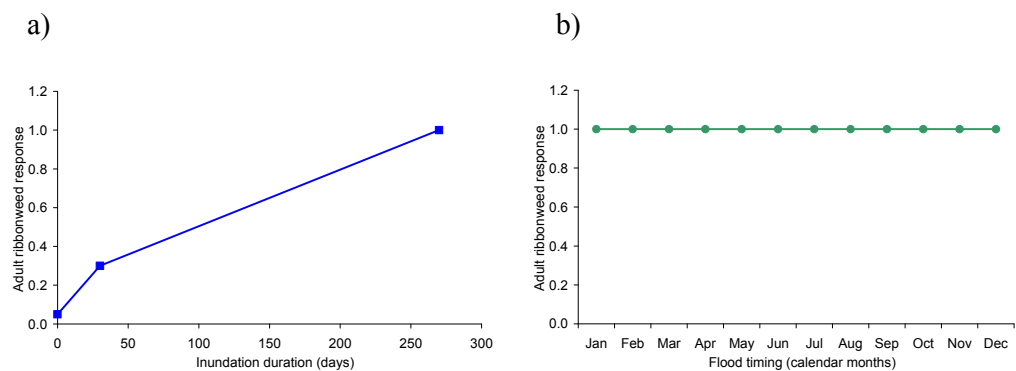


FIG. C11. Response of adult ribbonweed to: (a) flood duration (days); and (b) flood timing.

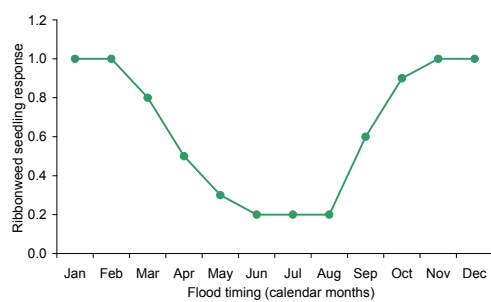


FIG. C12. Response of ribbonweed seedlings to flood timing.

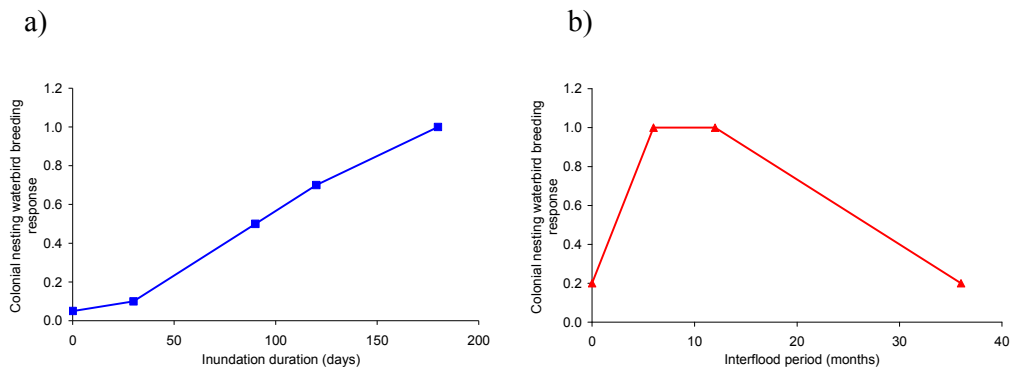


FIG. C13. Response of colonial nesting waterbird breeding to: (a) flood duration (days); and (b) interflood period (months).

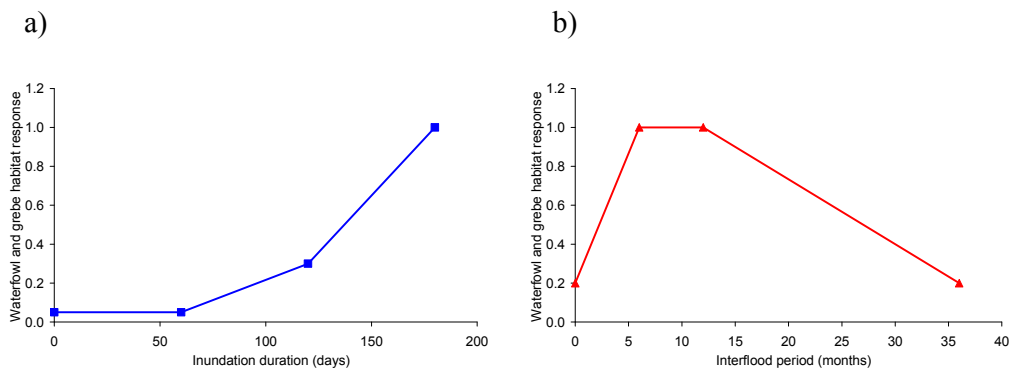


FIG. C14. Response of waterfowl and grebes to: (a) flood duration (days); and (b) interflood period (months).

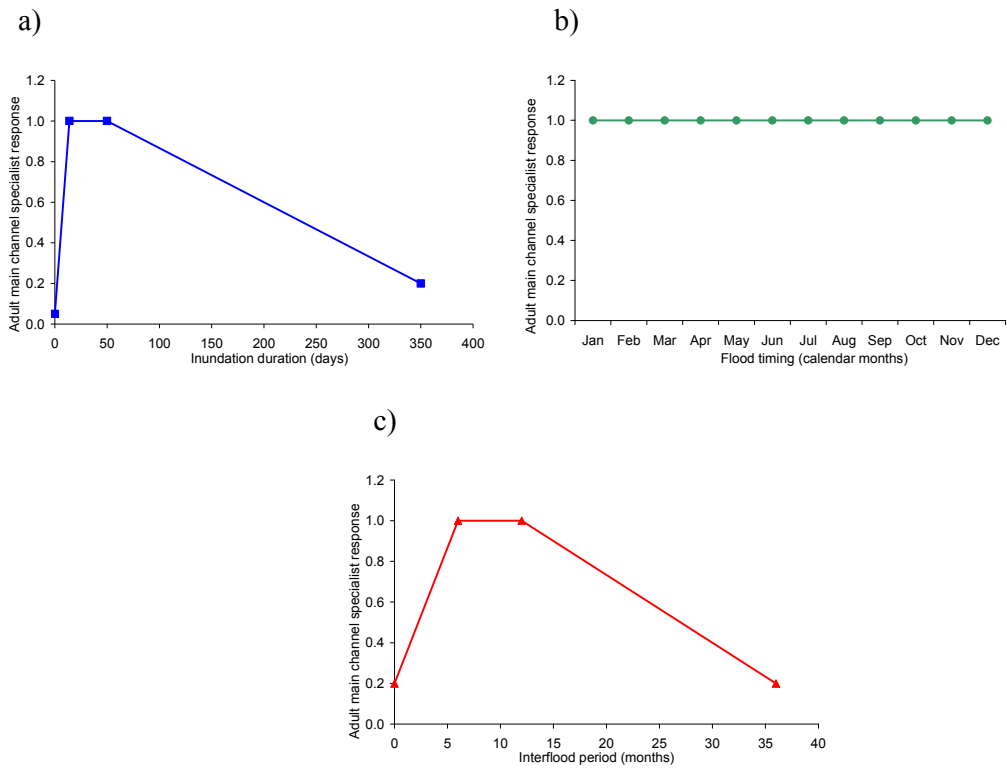


FIG. C15. Response of adult main channel specialists to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

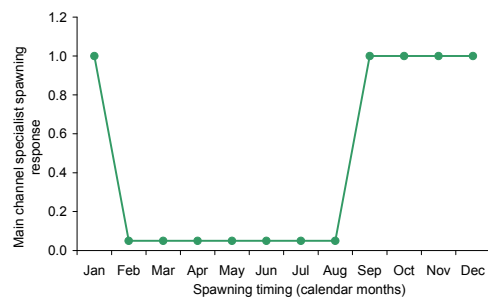


FIG. C16. Response of main channel specialist spawning to flood timing.

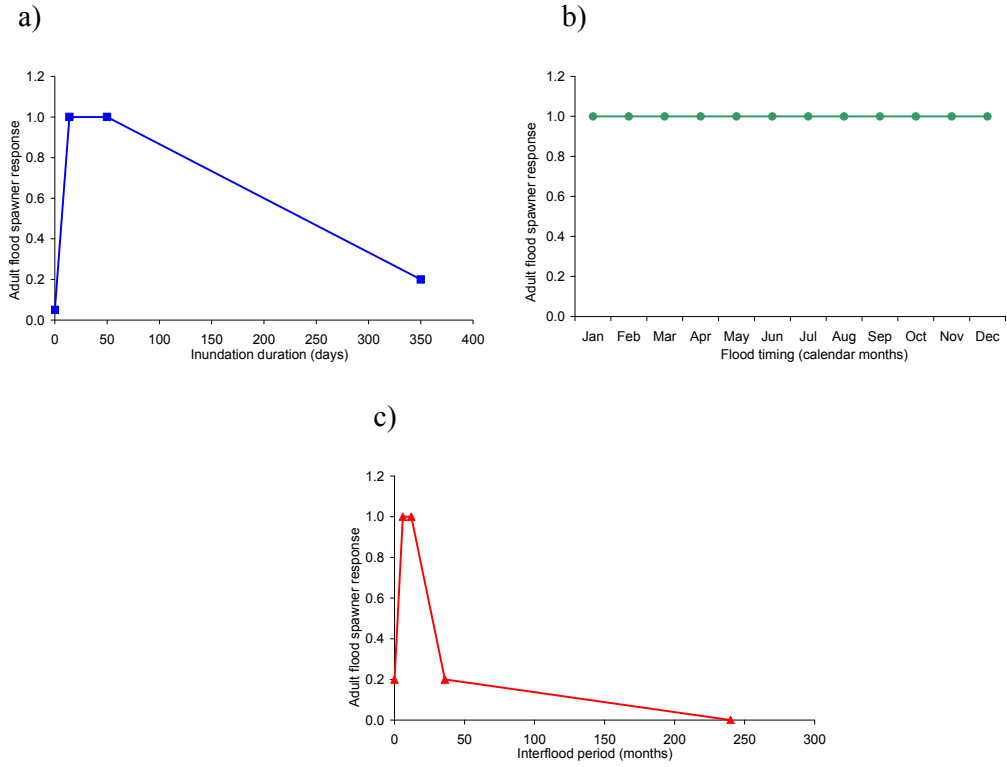


FIG. C17. Response of adult flood spawners to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

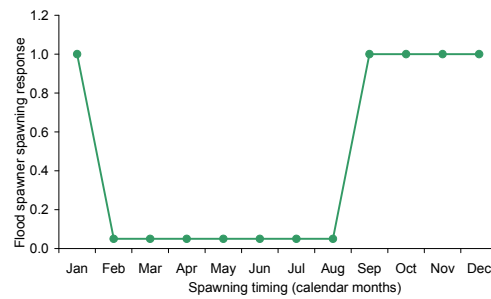


FIG. C18. Response of spawning flood spawners to flood timing.



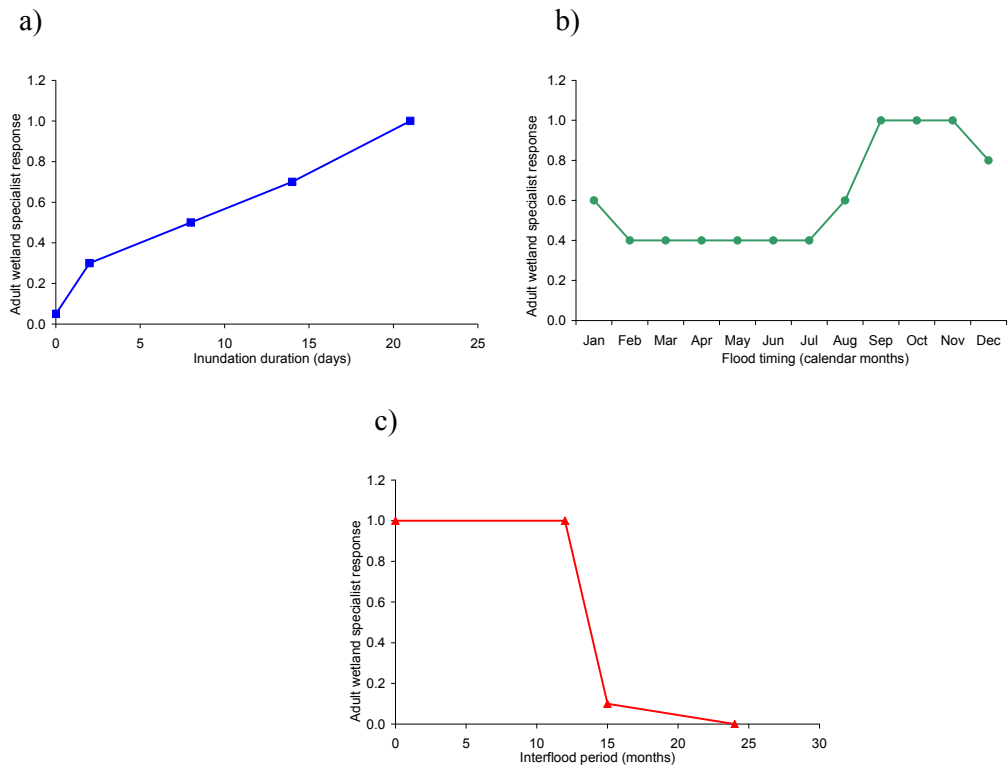


FIG. C19. Response of adult wetland specialists to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

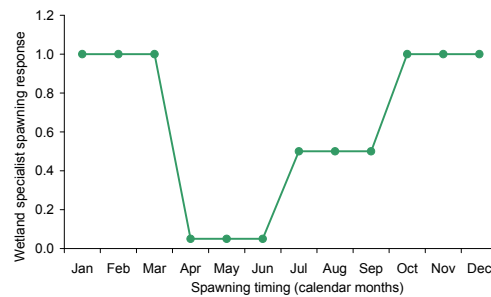


FIG. C20. Response of spawning wetland specialists to flood timing.

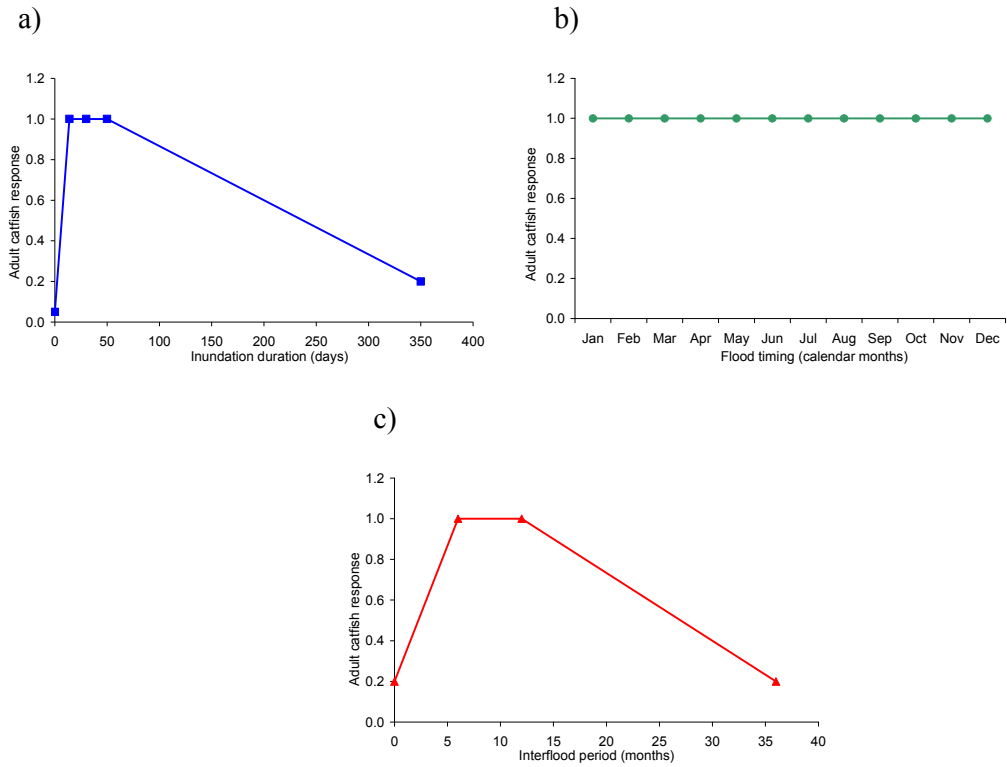


FIG. C21. Response of adult freshwater catfish to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

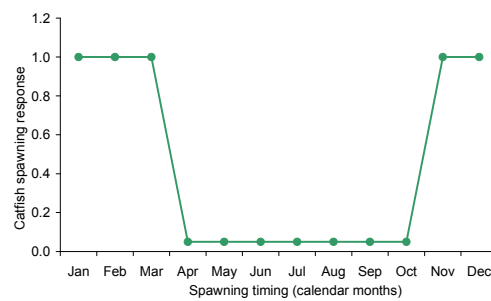


FIG. C22. Response of freshwater catfish spawning to flood timing.

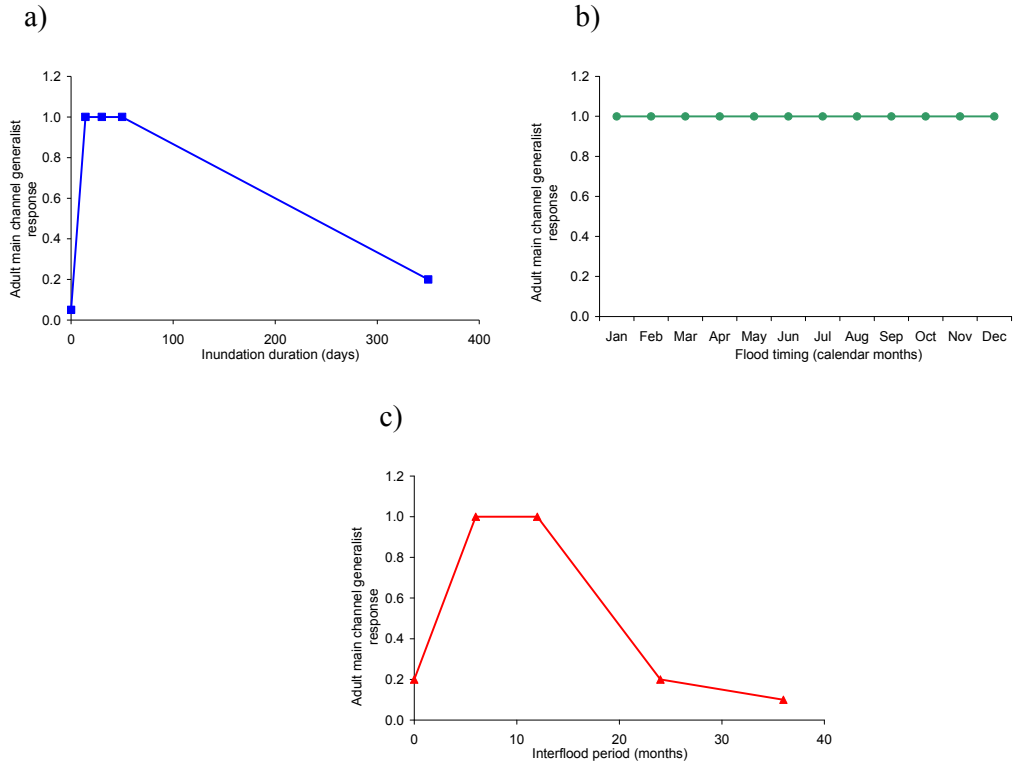


FIG. C23. Response of adult main channel generalists to: (a) flood duration (days); (b) flood timing; and (c) interflood period (months).

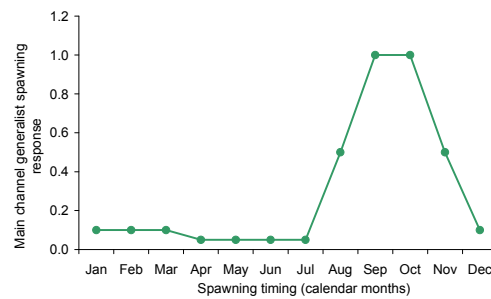


FIG. C24. Response of main channel generalist spawning to flood timing.

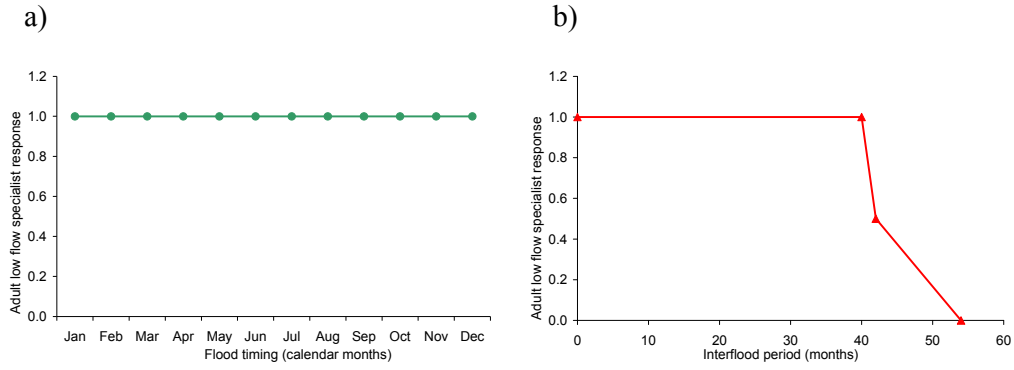


FIG. C25. Response of adult low flow specialists to: (a) flood timing; and (b) interflood period (months).

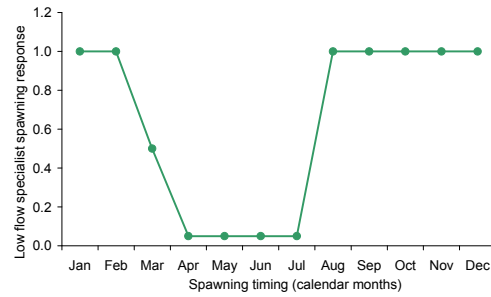


FIG. C26. Response of low flow specialist spawning to flood timing.