**Dynamic occupancy modelling to determine the status of a Critically Endangered lizard**

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Supplementary Table 1 Trapping summary for each site surveyed between 2015 and 2017: number of traps set during each survey, area surveyed (in square meters and acres to allow direct comparisons with Davenport et al., 1997; 2001; Glasspool & Outerbridge, 2004), total number of skinks caught, number of surveyors, number of days and hours spent surveying, total trap hours, trap density (number of traps/land area) and catch per unit effort (CPUE) expressed as (i) number of trap hours per skink and (ii) number of person hours per skink to allow direct comparisons with the earlier surveys. In comparison CPUE on Southampton Island in 1997 was 14.2 trap hours per skink (Davenport et al., 1997) and 2.95 trap hours per skink in 2004 (Glasspool & Outerbridge, 2004) and 8.9 trap hours per skink on Nonsuch Island (Davenport et al., 1997).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Site | No. of Traps | Area surveyed (m² / acres) | No. of skinks caught | No of surveyors | No of person days (hours) surveyed | Trap hours | Trap Density  (m² / acres) | CPUE | |
|  |  |  |  |  |  |  |  |  | Traps hours per skink | Person hours per skink |
| 1. | North Cock Rock | 10 | 1457 / 0.36 | 2 | 1 | 2 (10) | 100 | 0.00686 / 27.78 | 50 | 5 |
| 2. | South Cock Rock | 10 | 850 / 0.21 | 1 | 1 | 2 (10) | 100 | 0.01176 / 47.62 | 100 | 10 |
| 3. | Inner (Inner) Pear Rock | 4 | 405 / 0.10 | 0 | 3 | 2 (10) | 40 | 0.00988 / 40.00 | - | - |
| 4. | Inner (Middle) Pear Rock | 19 | 890 / 0.22 | 0 | 3 | 2 (10) | 190 | 0.0213 / 86.36 | - | - |
| 5. | Inner (Outer) Pear Rock | 25 | 1578 / 0.39 | 2 | 3 | 2 (10) | 250 | 0.0158 /64.10 | 125 | 5 |
| 6. | Outer Pear Rock | 25 | 1821 / 0.45 | 0 | 3 | 2 (10) | 250 | 0.01373/55.56 | - | - |
| 7. | Ferry Point Island | 10 | 5301 / 1.31 | 0 | 3 | 2 (10) | 100 | 0.00188 /7.63 | - | - |
| 8. | Bird Rock | 15 | 1174 / 0.29 | 0 | 1 | 2 (10) | 150 | 0.01277 /34.48 | - | - |
| 9. | Idol Island | 15 | 728 / 0.18 | 0 | 1 | 2 (10) | 150 | 0.02060 / 83.33 | - | - |
| 10. | Scaur Hill Fort | 20 | 4856 / 1.20 | 0 | 1 | 2 (10) | 200 | 0.00411 /16.67 | - | - |
| 11. | East Elbow Beach | 20 | 5463 / 1.35 | 0 | 1 | 2 (10) | 200 | 0.00366 / 14.81 | - | - |
| 12. | Shelley Bay | 20 | 4452 / 1.10 | 0 | 1 | 2 (10) | 200 | 0.00449 /18.18 | - | - |
| 13. | Spittal Pond (Jeffries Hole) | 21 | 2954 / 0.73 | 37 | 4 | 15 (75) | 1575 | 0.0071 / 28.76 | 43 | 2 |
| 14. | Spittal Pond (Checkerboard) | 21 | 7325 / 1.81 | 0 | 4 | 15 (75) | 1575 | 0.00286 / 21.73 | - | - |
| 15. | Spittal Pond (East End) | 33 | 9551 / 2.36 | 8 | 4 | 15 (75) | 2475 | 0.003455/13.98 | 309 | 9.4 |
| 16. | Sinky Bay | 25 | 3440 / 0.85 | 0 | 3 | 6 (30) | 750 | 0.0073 / 29.41 | - | - |
| 17. | Long Rock | 25 | 5463 / 1.35 | 0 | 3 | 2 (10) | 250 | 0.00457 / 18.52 | - | - |
| 18. | Rushy Island | 25 | 3237 / 0.80 | 1 | 2 | 2 (10) | 250 | 0.00772 /31.25 | 250 | 10 |
| 19. | Coney Island | 25 | 8498 / 2.10 | 0 | 2 | 2 (10) | 250 | 0.00294 / 11.09 | - | - |
| 20. | Charles Island | 25 | 11979 / 2.96 | 0 | 2 | 6 (30) | 750 | 0.00209 /8.45 | - | - |
| 21. | Grazbury Island | 25 | 3399 / 0.84 | 0 | 3 | 2 (10) | 250 | 0.00736 / 29.76 | - | - |
| 22. | Hog Bay Park | 27 | 6111 / 1.51 | 0 | 3 | 2 (10) | 270 | 0.01419 /17.88 | - | - |
| 23. | Astwood Park | 25 | 4249 / 1.05 | 0 | 3 | 2 (10) | 250 | 0.00588/23.81 | - | - |
| 24. | Horn Rock | 27 | 1902 / 0.47 | 2 | 3 | 6 (30) | 810 | 0.01419/57.45 | 405 | 15 |
| 25. | Church Bay | 30 | 4087 / 1.01 | 0 | 3 | 2 (10) | 300 | 0.00734/29.70 | - | - |
| 26. | John Smiths Bay | 30 | 4452 / 1.10 | 0 | 2 | 2 (10) | 300 | 0.00674/27.27 | - | - |
| 27. | Warwick Long Bay | 30 | 13152 / 3.25 | 0 | 3 | 2 (10) | 300 | 0.00228/9.23 | - | - |
| 28. | Green Island | 30 | 2226 / 0.55 | 0 | 3 | 2 (10) | 300 | 0.0135/54.55 | - | - |
| 29. | Ferry Point Park | 20 | 15378 / 3.80 | 0 | 3 | 2 (10) | 200 | 0.00130/ 5.26 | - | - |
| 30. | Seven Wells | 30 | 2711 / 0.67 | 0 | 2 | 2 (10) | 300 | 0.0111/44.77 | - | - |
| 31. | Devonshire Bay Park | 30 | 9915 / 2.45 | 0 | 2 | 2 (10) | 300 | 0.00303/12.24 | - | - |
| 32. | Nonsuch Island | 72 | 57142 / 14.12 | 97 | 4 | 15 (75) | 2400 | 0.00126/5.10 | 25 | 0.8 |
| 33. | Daniels Head | 35 | 7487 / 1.85 | 2 | 2 | 2 (10) | 350 | 0.004675/18.92 | 175 | 5 |
| 34. | Great Head Park | 40 | 9186 / 2.27 | 0 | 3 | 2 (10) | 400 | 0.00435/17.62 | - | - |
| 35. | Little Head Park | 40 | 9389 / 2.32 | 0 | 3 | 2 (10) | 400 | 0.00426/17.24 | - | - |
| 36. | Coopers Island | 45 | 12950 / 3.20 | 2 | 3 | 6 (30) | 1350 | 0.00347/14.06 | 675 | 15 |
| 37. | Fricks Beach | 60 | 4006 / 0.99 | 0 | 3 | 2 (10) | 600 | 0.0150/60.61 | - | - |
| 38. | Palm Island | 65 | 2671 / 0.66 | 1 | 2 | 6 (30) | 1950 | 0.02436/98.48 | 1950 | 30 |
| 39. | Castle Island | 65 | 16309 / 4.03 | 327 | 4 | 15 (75) | 4875 | 0.00399/16.13 | 15 | 0.2 |
| 40. | Southampton Island | 65 | 8903 / 2.20 | 692 | 4 | 15 (75) | 4875 | 0.0073/29.55 | 7 | 0.1 |