

Supplemental Appendix 1. Taxa list and abundances of species collected in Lac la Ronge. Wing type and mean body length for each species obtained from Lindroth (1969) and Bousquet (2010).

| Species  | Wing Type | Mean Body Length (mm) | Very small islands |     |     |     |     |     | Small islands |     |     |     |     |     |     | Medium islands |     |     |     |    |     | Large islands |     |     |    |     |     | Mainland |     |     |     |     |     |     |     |     |     |   |   |
|--|-----------|-----------------------|--------------------|-----|-----|-----|-----|-----|---------------|-----|-----|-----|-----|-----|-----|----------------|-----|-----|-----|----|-----|---------------|-----|-----|----|-----|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|
|  |           |                       | 1                  | 2   | 3   | 4   | 5   | 6   | 7             | 8   | 9   | 10  | 11  | 12  | 13  | 14             | 15  | 16  | 17  | 18 | 19  | 20            | 21  | 22  | 23 | 24  | 25  | 26       | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  |   |   |
| <i>Agonum affine</i> Kirby                       | M         | 8.6                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. corvus</i> (LeConte)                       | M         | 8.75                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. gratiosum</i> (Mannerheim)                 | M         | 7.75                  | 0                  | 11  | 1   | 2   | 2   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. melanarium</i> Dejean                      | M         | 9                     | 0                  | 13  | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. propinquum</i> (Gemminger & Harold)        | M         | 7.2                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. retractum</i> (LeConte)                    | D         | 6.9                   | 22                 | 17  | 72  | 21  | 133 | 53  | 64            | 94  | 18  | 29  | 31  | 4   | 39  | 13             | 59  | 61  | 28  | 1  | 31  | 1             | 36  | 9   | 4  | 16  | 5   | 29       | 5   | 2   | 8   | 14  | 11  | 135 | 30  | 1   | 0   |   |   |
| <i>A. sordens</i> (Kirby)                        | M         | 5.9                   | 0                  | 0   | 0   | 3   | 0   | 1   | 0             | 1   | 0   | 1   | 1   | 0   | 2   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 9  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Amara erratica</i> (Duftschmid)               | M         | 7.6                   | 0                  | 0   | 0   | 1   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |   |   |
| <i>A. littoralis</i> Mannerheim                  | M         | 8                     | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 1   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. patruelis</i> Dejean                       | M         | 8.65                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 3   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>A. sinuosa</i> (Casey)                        | M         | 6.6                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Bembidion bimaculatum</i> (Kirby)             | M         | 6.4                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Blethisa multipunctata</i> (Linne)            | M         | 11.75                 | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 1 | 0 |
| <i>Bradycellus lugubris</i> (LeConte)            | M         | 6.65                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 1   | 0   | 0   | 1   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 | 0 |
| <i>Calathus ingratus</i> Dejean                  | D         | 8.75                  | 7                  | 27  | 90  | 23  | 203 | 123 | 10            | 72  | 72  | 57  | 143 | 17  | 186 | 60             | 74  | 176 | 91  | 3  | 174 | 16            | 9   | 19  | 10 | 84  | 31  | 13       | 184 | 49  | 19  | 44  | 148 | 223 | 78  | 9   | 5   |   |   |
| <i>Carabus chamissonis</i> (Fisher von Waldheim) | B         | 14.45                 | 0                  | 0   | 1   | 9   | 31  | 2   | 1             | 0   | 0   | 110 | 16  | 48  | 20  | 53             | 0   | 12  | 21  | 7  | 63  | 3             | 5   | 2   | 0  | 46  | 116 | 8        | 66  | 30  | 12  | 9   | 5   | 7   | 11  | 11  | 7   |   |   |
| <i>C. taedatus</i> Fabricius                     | B         | 21.5                  | 0                  | 0   | 0   | 1   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 9   | 0   | 74  | 6  | 1   | 0             | 0   | 0   | 1  | 0   | 66  | 2        | 50  | 33  | 0   | 52  | 9   | 0   | 39  | 10  | 14  |   |   |
| <i>Calosoma frigidum</i> Kirby                   | M         | 22                    | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 1   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 1   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Cicindela longilabris</i> Say                 | M         | 16                    | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 1        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Cymindis cribricollis</i> Dejean              | D         | 9.7                   | 0                  | 1   | 2   | 0   | 3   | 4   | 0             | 0   | 0   | 0   | 0   | 1   | 0   | 1              | 0   | 0   | 3   | 0  | 6   | 0             | 0   | 0   | 0  | 3   | 0   | 0        | 0   | 0   | 0   | 1   | 1   | 0   | 1   | 0   | 1   |   |   |
| <i>C. unicolor</i> Kirby                         | B         | 8.75                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 1   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 3        | 0   | 1   | 1   | 0   | 0   | 0   | 0   | 0   | 0   |   |   |
| <i>Elaphrus clairvillei</i> Kirby                | M         | 9.1                   | 0                  | 0   | 0   | 1   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 1   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Harpalus fulvilabris</i> Mannerheim           | D         | 9.95                  | 0                  | 2   | 4   | 1   | 0   | 0   | 0             | 1   | 1   | 0   | 0   | 0   | 0   | 0              | 3   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 2   | 1   | 1   | 0   | 0   | 0   |   |   |
| <i>H. laevipes</i> Zetterstedt                   | M         | 11.3                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 1   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Loricera pilicornis</i> (Fabricius)           | M         | 7.75                  | 0                  | 1   | 1   | 0   | 0   | 1   | 0             | 0   | 0   | 0   | 1   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 1   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Miscodera arctica</i> Mannerheim              | M         | 8                     | 0                  | 0   | 1   | 0   | 0   | 2   | 0             | 0   | 1   | 0   | 0   | 1   | 0   | 0              | 0   | 0   | 0   | 0  | 1   | 0             | 0   | 0   | 0  | 0   | 0   | 1        | 0   | 0   | 1   | 0   | 0   | 1   | 0   | 0   | 0   | 0 |   |
| <i>Patrobus foveocollis</i> (Eschscholtz)        | D         | 9.8                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 4   | 0   | 0   | 0   | 0   | 0   | 0   |   |   |
| <i>P. septentrionis</i> Dejean                   | M         | 9.95                  | 0                  | 1   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 1   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Platynus decentis</i> (Say)                   | M         | 11.5                  | 1                  | 132 | 31  | 43  | 39  | 113 | 15            | 8   | 80  | 49  | 56  | 6   | 41  | 13             | 17  | 108 | 6   | 5  | 136 | 1             | 3   | 0   | 21 | 14  | 6   | 5        | 34  | 5   | 18  | 0   | 41  | 40  | 12  | 6   | 0   |   |   |
| <i>P. mannerheimii</i> (Dejean)                  | M         | 12.1                  | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 1   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Pterostichus adstrictus</i> (Eschscholtz)     | M         | 11.25                 | 61                 | 335 | 76  | 179 | 215 | 200 | 36            | 229 | 124 | 94  | 96  | 27  | 52  | 50             | 22  | 38  | 86  | 6  | 210 | 20            | 31  | 83  | 15 | 128 | 81  | 10       | 58  | 39  | 32  | 21  | 26  | 117 | 35  | 13  | 46  |   |   |
| <i>P. brevicornis</i> (Kirby)                    | B         | 5.5                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 0   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 1  | 0   | 0   | 1        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>P. pennsylvanicus</i> (LeConte)               | M         | 10.75                 | 10                 | 4   | 3   | 4   | 42  | 3   | 1             | 6   | 9   | 2   | 7   | 5   | 2   | 0              | 27  | 1   | 20  | 0  | 7   | 0             | 1   | 18  | 0  | 8   | 3   | 5        | 2   | 4   | 0   | 7   | 1   | 21  | 18  | 1   | 2   |   |   |
| <i>P. punctatissimus</i> (Randall)               | B         | 16.5                  | 1                  | 0   | 40  | 12  | 18  | 53  | 11            | 0   | 2   | 9   | 6   | 53  | 18  | 22             | 10  | 3   | 43  | 14 | 42  | 17            | 9   | 48  | 5  | 6   | 41  | 10       | 66  | 42  | 11  | 12  | 39  | 5   | 22  | 51  | 14  |   |   |
| <i>Stereocerus haematopus</i> (Dejean)           | M         | 11                    | 0                  | 41  | 5   | 23  | 96  | 101 | 5             | 2   | 2   | 31  | 27  | 1   | 2   | 42             | 0   | 6   | 61  | 0  | 38  | 1             | 11  | 7   | 13 | 19  | 40  | 3        | 85  | 56  | 11  | 1   | 38  | 46  | 23  | 16  | 3   |   |   |
| <i>Syntomus americanus</i> (Dejean)              | D         | 3.1                   | 4                  | 0   | 0   | 0   | 1   | 0   | 0             | 1   | 0   | 0   | 6   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 0   | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Synuchus impunctatus</i> (Say)                | D         | 9.95                  | 1                  | 1   | 12  | 42  | 30  | 14  | 2             | 36  | 36  | 11  | 55  | 0   | 31  | 12             | 11  | 1   | 9   | 1  | 3   | 15            | 4   | 114 | 1  | 12  | 7   | 2        | 4   | 8   | 1   | 90  | 2   | 58  | 39  | 0   | 115 |   |   |
| <i>Trachypachus holmbergi</i> Mannerheim         | M         | 4.8                   | 35                 | 3   | 2   | 0   | 0   | 0   | 0             | 1   | 1   | 11  | 7   | 0   | 1   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 0  | 19  | 0   | 0        | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0 |   |
| <i>Trechus apicalis</i> Motschulsky              | D         | 4.3                   | 0                  | 0   | 0   | 0   | 0   | 0   | 0             | 0   | 0   | 0   | 1   | 0   | 0   | 0              | 0   | 0   | 0   | 0  | 0   | 0             | 0   | 0   | 1  | 0   | 0   | 0        | 0   | 0   | 2   | 0   | 0   | 0   | 0   | 0   | 0   |   |   |
| Total no. of individuals                         |           |                       | 142                | 589 | 341 | 365 | 813 | 670 | 146           | 452 | 351 | 407 | 460 | 163 | 399 | 267            | 232 | 406 | 443 | 43 | 718 | 74            | 110 | 301 | 85 | 355 | 396 | 89       | 559 | 268 | 119 | 255 | 325 | 654 | 309 | 119 | 207 |   |   |
| Total no. of species                             |           |                       | 9                  | 14  | 15  | 15  | 12  | 13  | 10            | 12  | 15  | 14  | 15  | 10  | 14  | 10             | 9   | 9   | 12  | 8  | 16  | 8             | 10  | 9   | 14 | 11  | 10  | 12       | 13  | 10  | 11  | 13  | 13  | 12  | 12  | 10  | 9   |   |   |