**Supplementary Materials**

**Table S1. The correlation coefficients and variation coefficients of landscape metrics.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Landscape metrics** | TA | NP | PD | ED | AREA\_MN | SHAPE\_MN | SHAPE\_AM | FRAC\_MN | FRAC\_AM | CONTIG\_MN | ENN\_MN | COHESION | AI |
| TA | 1.00 |  |  |  |  |  |  |  |  |  |  |  |  |
| NP | 0.53\*\* | 1.00 |  |  |  |  |  |  |  |  |  |  |  |
| PD | -0.19\* | 0.22\* | 1.00 |  |  |  |  |  |  |  |  |  |  |
| ED | -0.24\*\* | 0.25\*\* | 0.96\*\* | 1.00 |  |  |  |  |  |  |  |  |  |
| AREA\_MN | 0.04 | -0.23\*\* | -0.13 | -0.22\* | 1.00 |  |  |  |  |  |  |  |  |
| SHAPE\_MN | 0.00 | -0.16 | -0.13 | -0.09 | 0.48\*\* | 1.00 |  |  |  |  |  |  |  |
| SHAPE\_AM | 0.01 | -0.06 | 0.14 | 0.25\* | 0.17 | 0.55\*\* | 1.00 |  |  |  |  |  |  |
| FRAC\_MN | 0.00 | 0.07 | 0.15 | 0.21\* | 0.24\*\* | 0.84\*\* | 0.54\*\* | 1.00 |  |  |  |  |  |
| FRAC\_AM | -0.11 | 0.06 | 0.50\*\* | 0.60\*\* | 0.04 | 0.45\*\* | 0.89\*\* | 0.62\*\* | 1.00 |  |  |  |  |
| CONTIG\_MN | 0.13 | -0.31\*\* | -0.89\*\* | -0.90\*\* | 0.29\*\* | 0.19\* | -0.27\*\* | -0.19\* | -0.59\*\* | 1.00 |  |  |  |
| ENN\_MN | -0.23\* | -0.31\*\* | -0.15 | -0.15 | -0.04 | -0.01 | -0.06 | -0.21\* | -0.14 | 0.32\*\* | 1.00 |  |  |
| COHESION | 0.19\* | -0.37\*\* | -0.93\*\* | -0.93\*\* | 0.29\*\* | 0.26\* | 0.07 | -0.08 | -0.33\*\* | 0.85\*\* | 0.19\* | 1.00 |  |
| AI | 0.23\* | -0.27\*\* | -0.97\*\* | -1.00\*\* | 0.22\*\* | 0.10 | -0.24\*\* | -0.21\* | -0.59\*\* | 0.90\*\* | 0.12 | 0.94\*\* | 1.00 |
| CV | 1.16 | 1.08 | 3.01 | 1.08 | 2.08 | 0.22 | 0.33 | 0.02 | 0.04 | 0.17 | 1.27 | 0.02 | 0.07 |

\*\* The correlation is significant at the 0.01 level (double tail); \* The correlation is significant at the 0.05 level (double tail). Abbreviations: CV—coefficient of variation

**Table S2. Evaluation results of conservation effectiveness of reserves.**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Reserve No.** | **Reserve** |  |  |  |  |  |  |  |  |  |  |  |  |  | **Conservation effectiveness** |
| 1 | Ximen Island | / | / | / | 0.1955 | 0.1696 | -0.0260 | / | / | / | / | -13.28% | -13.28% | / | Ordinary |
| 2 | Quanzhou Bay | / | / | 0.1222 | 0.1575 | 0.1516 | 0.0295 | >0 | / | / | 28.96% | -3.75% | 24.12% | / | Excellent |
| 3 | Jiulong Estuary | 0.1252 | 0.1222 | 0.1350 | 0.1299 | 0.1296 | 0.0044 | >0 | -2.38% | 10.50% | -3.81% | -0.23% | 3.52% | / | Excellent |
| 4 | Zhangjiang Estuary | / | 0.1460 | 0.1436 | 0.1368 | 0.1414 | -0.0046 | / | / | -1.66% | -4.69% | 3.33% | -3.14% | >0 | Good |
| 5 | Danshui Estuary | 0.1313 | 0.1406 | 0.1364 | 0.1239 | 0.1246 | -0.0067 | / | 7.03% | -2.97% | -9.15% | 0.60% | -5.09% | <0 | Ordinary |
| 6 | Mai Po | 0.3177 | 0.4300 | 0.2939 | 0.2498 | 0.2393 | -0.0784 | / | 35.36% | -31.65% | -15.02% | -4.20% | -24.68% | <0 | Ordinary |
| 7 | Futian | 0.1483 | 0.1483 | 0.1423 | 0.1342 | 0.1436 | -0.0047 | / | 0.00% | -4.02% | -5.73% | 7.03% | -3.17% | >0 | Good |
| 8 | Qi’ao Island | 0.1003 | 0.1086 | 0.1261 | 0.5837 | 0.6219 | 0.5215 | >0 | 8.20% | 16.16% | 362.82% | 6.54% | 519.78% | / | Excellent |
| 9 | Enping and Zhenhai Bay | / | / | 0.1246 | 0.1502 | 0.1566 | 0.0320 | >0 | / | / | 20.52% | 4.26% | 25.65% | / | Excellent |
| 10 | Pinggang and Haoguang | / | / | 0.1366 | 0.1436 | 0.1455 | 0.0090 | >0 | / | / | 5.19% | 1.30% | 6.56% | / | Excellent |
| 11 | Dianbai | / | 0.1292 | 0.1136 | 0.1231 | 0.1231 | -0.0061 | / | / | -12.08% | 8.34% | 0.02% | -4.73% | >0 | Good |
| 12 | Tongming Bay | / | 0.3899 | 0.2723 | 0.2083 | 0.2145 | -0.1754 | / | / | -30.16% | -23.52% | 3.00% | -44.98% | >0 | Good |
| 13 | Xinliao-Hean | / | 0.1525 | 0.1535 | 0.1464 | 0.1462 | -0.0063 | / | / | 0.61% | -4.61% | -0.09% | -4.11% | <0 | Ordinary |
| 14 | Gaoqiao-Anpu | / | 0.1820 | 0.1897 | 0.2026 | 0.2041 | 0.0221 | >0 | / | 4.24% | 6.78% | 0.74% | 12.13% | / | Excellent |
| 15 | Shankou | / | 0.1888 | 0.2033 | 0.2031 | 0.2063 | 0.0174 | >0 | / | 7.69% | -0.11% | 1.55% | 9.24% | / | Excellent |
| 16 | Maowei Gulf | / | / | 0.1390 | 0.1992 | 0.2016 | 0.0626 | >0 | / | / | 43.24% | 1.24% | 45.01% | / | Excellent |
| 17 | Beilun Estuary | / | 0.1603 | 0.1717 | 0.1606 | 0.1602 | -0.0001 | / | / | 7.14% | -6.51% | -0.23% | -0.07% | <0 | Ordinary |
| 18 | Dongzhaigang | 0.2512 | 0.2628 | 0.2627 | 0.2636 | 0.2678 | 0.0166 | >0 | 4.60% | -0.01% | 0.34% | 1.59% | 6.61% | / | Excellent |
| 19 | Huachang Bay | / | 0.1318 | 0.1221 | 0.1193 | 0.1204 | -0.0114 | / |  | -7.34% | -2.28% | 0.91% | -8.63% | >0 | Good |
| 20 | Caiqiao and Dongchang | 0.1472 | 0.1849 | 0.1616 | 0.1599 | 0.1570 | 0.0098 | <0 | 25.62% | -12.56% | -1.10% | -1.80% | 6.68% | / | Good |
| 21 | Xinying Bay | / | 0.1948 | 0.1452 | 0.1377 | 0.1358 | -0.0590 | / | / | -25.44% | -5.16% | -1.38% | -30.27% | >0 | Good |
| 22 | Sanya River | / | 0.0801 | 0.0801 | 0.0805 | 0.0805 | 0.0004 | >0 | / | 0.00% | 0.52% | 0.02% | 0.54% | / | Excellent |
| 23 | Qinglan | 0.2672 | 0.2258 | 0.1978 | 0.1896 | 0.1895 | -0.0776 | / | -15.47% | -12.43% | -4.12% | -0.04% | -29.06% | >0 | Good |