|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **PITLAKE NUMBER** | **LATITUDE** | **LONGITUDE** | **MINING AREA** | **STATE** | **DISTRICT** | **LAKE AREA (ha.)** | **ELEVATION (m.)** |
| 1 | 23.69518 | 87.283187 | JHANJRA | WB | PB | 15 | 78 |
| 2 | 23.71337 | 87.26175 | PANDABESWAR | WB | PB | 10.5 | 92 |
| 3 | 23.71737 | 87.241065 | PANDABESWAR | WB | PB | 18 | 95 |
| 4 | 23.67065 | 87.194739 | KENDA | WB | PB | 5.2 | 108 |
| 5 | 23.62843 | 87.157255 | KUNUSTORIA | WB | PB | 6.5 | 84 |
| 6 | 23.63339 | 87.161137 | KUNUSTORIA | WB | PB | 6.5 | 87 |
| 7 | 23.6 | 87.162428 | KAJORA | WB | PB | 7 | 81 |
| 8 | 23.67227 | 87.176649 | KENDA | WB | PB | 8.8 | 104 |
| 9 | 23.68772 | 87.0528 | SRIPUR | WB | PB | 5 | 109 |
| 10 | 23.60974 | 87.065772 | SATGRAM | WB | PB | 6 | 83 |
| 11 | 23.60925 | 87.065145 | SATGRAM | WB | PB | 2 | 83 |
| 12 | 23.60426 | 87.070547 | SATGRAM | WB | PB | 6.8 | 84 |
| 13 | 23.77315 | 86.883459 | SALANPUR | WB | PB | 15 | 140 |
| 14 | 23.78519 | 86.924778 | SALANPUR | WB | PB | 16.8 | 147 |
| 15 | 23.78905 | 86.9576278 | SALANPUR | WB | PB | 4.5 | 140 |
| 16 | 23.81479 | 86.997859 | SRIPUR | WB | PB | 8 | 130 |
| 17 | 23.75995 | 86.866493 | SODEPUR | WB | PB | 2.8 | 130 |
| 18 | 23.79715 | 86.696175 | MUGMA | JH | DB | 4.2 | 138 |
| 19 | 23.78013 | 86.703036 | MUGMA | JH | DB | 14 | 139 |
| 20 | 23.75537 | 86.774697 | MUGMA | JH | DB | 3.5 | 134 |

Supplementary Material 1: Basic Information regarding studied pitlakes. (WB- West Bengal; JH-Jharkhand; PB- Paschim Bardhaman; DB- Dhanbad)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ENVIRONMENTAL LAYERS | DESCRIPTION | AI | NC | NR |
| alt | Altitude | 11 | 31.4 | 17.1 |
| bio\_1 | Annual Mean Temperature | 1.9 | 11.3 | 11.1 |
| bio\_2 | Mean Diurnal Range | 11.5 | 2.5 | 7 |
| bio\_3 | Isothermality | 20.8 | 19.1 | 9.3 |
| bio\_4 | Temperature Seasonality | 19.8 | NA | 29.5 |
| bio\_8 | Mean Temperature of Wettest Quarter | NA | 0.4 | NA |
| bio\_9 | Mean Temperature of Driest Quarter | NA | 2.6 | 4.6 |
| bio\_12 | Annual Precipitation | 26.3 | 22.5 | 4.5 |
| bio\_14 | Precipitation of Driest Month | 5.9 | 1.4 | 11.1 |
| bio\_15 | Precipitation Seasonality | NA | 2.5 | 5.2 |
| bio\_18 | Precipitation of Warmest Quarter | NA | 6.5 | NA |
| bio\_19 | Precipitation of Coldest Quarter | 2 | NA | NA |

Supplementary Material 2: Environmental layer contribution towards building models. (AI: *Anser indicus*’s SDM; NC: *Nettapus coromandelianus*’s SDM; NR: *Netta rufina*’s SDM; NA: Not Applicable)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Zone | Grid No. | Pitlake no. 1 | | Grid No. | Pitlake No. 9 | | Grid No. | Pitlake No. 16 | |
| CPS |  | Longitude | Latitude |  | Longitude | Latitude |  | Longitude | Latitude |
|  | 29 | 87.27726 | 23.70038 | 32 | 87.04801 | 23.68693 | 40 | 86.95902 | 23.79049 |
|  | 37 | 87.27815 | 23.70127 | 39 | 87.0489 | 23.68871 | 41 | 86.95902 | 23.7896 |
|  | 38 | 87.27815 | 23.70038 | 40 | 87.0489 | 23.68782 | 49 | 86.95991 | 23.79049 |
|  | 47 | 87.27904 | 23.70038 | 41 | 87.0489 | 23.68693 | 50 | 86.95991 | 23.7896 |
|  | 39 | 87.27815 | 23.69949 | 42 | 87.0489 | 23.68604 | 58 | 86.9608 | 23.79049 |
|  | 48 | 87.27904 | 23.69949 | 47 | 87.04979 | 23.6896 | 59 | 86.9608 | 23.7896 |
|  | 57 | 87.27993 | 23.69949 | 48 | 87.04979 | 23.68871 | 66 | 86.96169 | 23.79138 |
|  | 66 | 87.28082 | 23.69949 | 49 | 87.04979 | 23.68782 | 67 | 86.96169 | 23.79049 |
|  | 75 | 87.28171 | 23.69949 | 50 | 87.04979 | 23.68693 | 68 | 86.96169 | 23.7896 |
|  | 84 | 87.2826 | 23.69949 | 56 | 87.05068 | 23.6896 | 75 | 86.96258 | 23.79138 |
|  | 93 | 87.28349 | 23.69949 | 58 | 87.05068 | 23.68782 | 76 | 86.96258 | 23.79049 |
|  | 102 | 87.28438 | 23.69949 | 59 | 87.05068 | 23.68693 | 77 | 86.96258 | 23.7896 |
|  | 49 | 87.27904 | 23.6986 |  |  |  | 85 | 86.96347 | 23.79049 |
|  | 58 | 87.27993 | 23.6986 |  |  |  | 86 | 86.96347 | 23.7896 |
|  | 59 | 87.27993 | 23.69771 |  |  |  | 94 | 86.96436 | 23.79049 |
|  | 67 | 87.28082 | 23.6986 |  |  |  | 95 | 86.96436 | 23.7896 |
|  | 68 | 87.28082 | 23.69771 |  |  |  | 103 | 86.96525 | 23.79049 |
|  | 76 | 87.28171 | 23.6986 |  |  |  | 104 | 86.96525 | 23.7896 |
|  | 77 | 87.28171 | 23.69771 |  |  |  | 112 | 86.96614 | 23.79049 |
|  | 78 | 87.28171 | 23.69682 |  |  |  | 113 | 86.96614 | 23.7896 |
|  | 85 | 87.2826 | 23.6986 |  |  |  |  |  |  |
|  | 86 | 87.2826 | 23.69771 |  |  |  |  |  |  |
|  | 87 | 87.2826 | 23.69682 |  |  |  |  |  |  |
|  | 94 | 87.28349 | 23.6986 |  |  |  |  |  |  |
|  | 95 | 87.28349 | 23.69771 |  |  |  |  |  |  |
|  | 96 | 87.28349 | 23.69682 |  |  |  |  |  |  |
|  | 105 | 87.28438 | 23.69682 |  |  |  |  |  |  |
| HDZ | 30 | 87.27726 | 23.69949 | 51 | 87.04979 | 23.68604 | 32 | 86.95813 | 23.7896 |
|  | 40 | 87.27815 | 23.6986 | 57 | 87.05068 | 23.68871 | 51 | 86.95991 | 23.78871 |
|  | 41 | 87.27815 | 23.69771 | 60 | 87.05068 | 23.68604 | 60 | 86.9608 | 23.78871 |
|  | 50 | 87.27904 | 23.69771 | 66 | 87.05157 | 23.68871 | 69 | 86.96169 | 23.78871 |
|  | 51 | 87.27904 | 23.69682 | 67 | 87.05157 | 23.68782 | 78 | 86.96258 | 23.78871 |
|  | 60 | 87.27993 | 23.69682 | 68 | 87.05157 | 23.68693 | 87 | 86.96347 | 23.78871 |
|  | 69 | 87.28082 | 23.69682 |  |  |  | 96 | 86.96436 | 23.78871 |
|  | 79 | 87.28171 | 23.69593 |  |  |  | 105 | 86.96525 | 23.78871 |
|  | 88 | 87.2826 | 23.69593 |  |  |  | 114 | 86.96614 | 23.78871 |
|  |  |  |  |  |  |  | 121 | 86.96703 | 23.79049 |
|  |  |  |  |  |  |  | 122 | 86.96703 | 23.7896 |
|  |  |  |  |  |  |  |  |  |  |
| EOZ | 28 | 87.27726 | 23.70127 | 65 | 87.05157 | 23.6896 | 31 | 86.95813 | 23.79049 |
|  | 46 | 87.27904 | 23.70127 | 69 | 87.05157 | 23.68604 | 39 | 86.95902 | 23.79138 |
|  | 56 | 87.27993 | 23.70038 | 75 | 87.05246 | 23.68871 | 42 | 86.95902 | 23.78871 |
|  | 97 | 87.28349 | 23.69593 | 76 | 87.05246 | 23.68782 | 48 | 86.95991 | 23.79138 |
|  | 103 | 87.28438 | 23.6986 | 77 | 87.05246 | 23.68693 | 57 | 86.9608 | 23.79138 |
|  | 104 | 87.28438 | 23.69771 |  |  |  | 84 | 86.96347 | 23.79138 |
|  | 106 | 87.28438 | 23.69593 |  |  |  | 93 | 86.96436 | 23.79138 |
|  |  |  |  |  |  |  | 102 | 86.96525 | 23.79138 |
|  |  |  |  |  |  |  | 111 | 86.96614 | 23.79138 |
|  |  |  |  |  |  |  | 123 | 86.96703 | 23.78871 |

Supplementary Material 3: GIS information regarding each zones from selected pitlakes.

**Title Page**

Title: Spatial prioritisation of selected mining pitlakes from Eastern Coalfields region, India: a species distribution modelling approach

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Short running title: Spatial prioritisation of pitlakes from India

Keywords: Conservation, pitlake, species distribution modelling, wetland conservation

Type of article: Contributed Paper

Article Impact Statement: Mining pitlakes around the world needs to be reassessed using strenuous scientific methodologies for effective conservation of all floral and faunal components associated with it.

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Number of Figures & Tables: 6

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