

Table S1. Three major vegetation types of Poyang Lake according to Wan et al. (2018).

Vegetation Type	Dominant Species
Reeds	<i>Phragmites communis</i>
	<i>Miscanthus sacchariflorus</i>
	<i>Artemisia selengensis</i>
Sedges	<i>Artemisia rubripes</i>
	<i>Polygonum caespitosum</i>
	<i>Zizania caduciflora</i>
	<i>Carex cinerascens</i>
	<i>Carex brevicuspis</i>
	<i>Carex scabrifolia</i>
	<i>Carex argyi.</i>
	<i>Carex doniana</i>
	<i>Carex unisexualis</i>
	<i>C. laticeps</i>
Aquatics	<i>Phalaris arundinacea</i>
	<i>Polygonum orientale</i>
	<i>Polygonum japonicum</i>
	<i>Cardamine lyrata</i>
	<i>Potentilla limprichtii</i>
	<i>Vallisneria natans</i>
	<i>Potamogeton malaianus</i>
	<i>Potamogeton crispus</i>
	<i>Trapa maximowiczii</i>
	<i>Hydrilla verticillata</i> var. <i>rosburghii</i>
	<i>Najas minor</i>

Table S2. Details of the Landsat 8 image data used which was downloaded from USGS.

Satellite	Sensor	Path/Row	Acquisition Date	Level of Processing	Resolution	Wavelength (μm)
Landsat 8	OLI	121/40	2015-12-22 and 2019-02-23	L1T	30m	Band 1:0.435–0.453
						Band 2:0.452–0.4512
						Band 3: 0.533–0.590
						Band 4: 0.636–0.673
						Band 5: 0.851–0.879
						Band 6: 1.566–1.651
						Band 7: 2.107–2.294
						Band 9: 1.363–1.384

Table S3. The Criteria weights for herbivorous ANSERIFORMES habitat suitability determined using an AHP method.

Criteria	Pair Wise Comparison Matrix					Normalized Pair Wise Comparison Matrix					Weights (a+b+c+d+e)/5
	1	2	3	4	5	1(a)	2(b)	3(c)	4(d)	5(e)	
(1) NDVI	1	1	3	5	6	0.370	0.366	0.375	0.357	0.400	0.37
(2) Land cover	1	1	3	5	5	0.370	0.366	0.375	0.357	0.333	0.36
(3) NDMI	1/3	1/3	1	2	2	0.123	0.122	0.125	0.143	0.133	0.13
(4) Slope	1/5	1/5	1/5	1	1	0.074	0.073	0.063	0.071	0.067	0.07
(5) Disturbance	1/6	1/5	1/5	1	1	0.062	0.073	0.027	0.071	0.067	0.06
Total	2.7	2.733	7.4	14	15	1	1	1	1	1	1

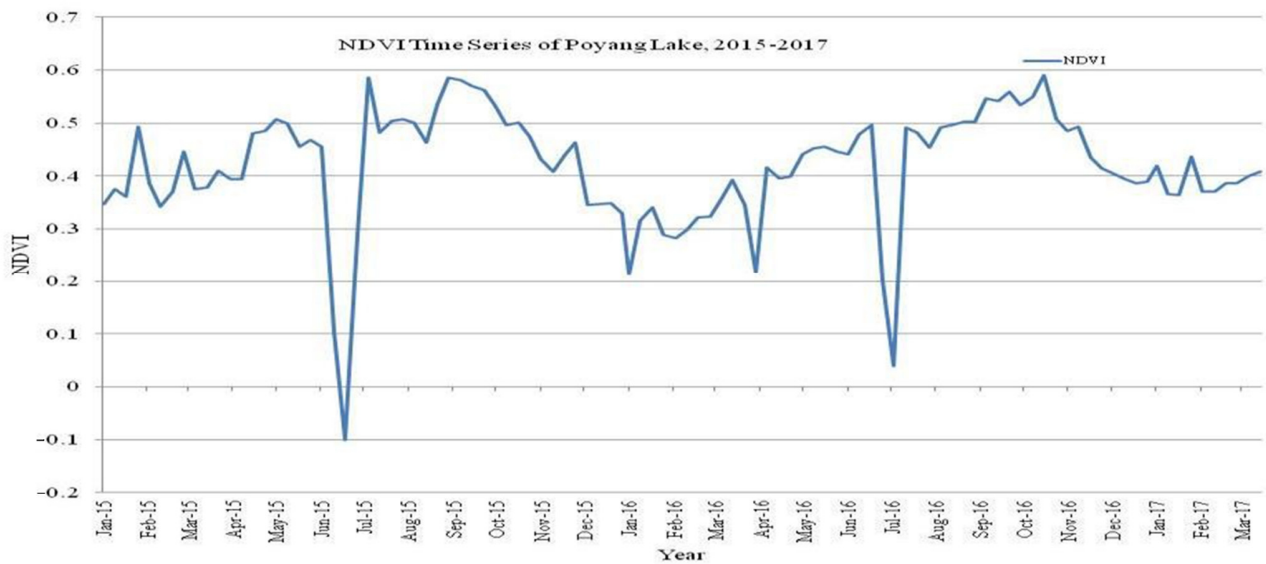


Figure S1. NDVI time series (2015–2017) derived from MODIS imagery obtained from Google Earth Engine.