Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary information

Geographical patterns of denitrifying bacterial communities associated with different urban lakes

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Table S1 A list of sample collection sites, and location of nine geographically distributed urban lakes, China

Urban lakes	**Location**	**Latitude**	**Longitude**	**Surface area(m^2)**	**Built year**	**Functions**
Aolinpike (ALPK)	Beijing	40°01′31″	116°23′03″	6800,000	2007	Recreation
Daminggong (DMG)	Shaanxi	34°18′35″	108°58′06″	130,000	2010	Scenic
Guanshanhu (GSH)	Guizhou	26°38′46″	106°38′29″	3700,000	2012	Recreation
Huangshui (HS)	Qinghai	36°38′38″	108°57′69″	900,000	2006	Scenic
Jingyuetan (JYT)	Jilin	43°17′18″	125°28′39″	96380,000	1934	Scenic
Pingzhuang (PZ)	Inner Mongolia	42°03′19″	119°17′26″	439,000	1993	Recreation
Renmin (RM)	Henan	35°18′18″	113°53′25″	491,000	1958	Recreation
Yantan (YT)	Gansu	36°03′59″	103°51′43″	185,000	2001	Recreation
Zhongxinhu (ZXH)	Guangzhou	23°03′25″	113°24′04″	18000,000	2004	Recreation

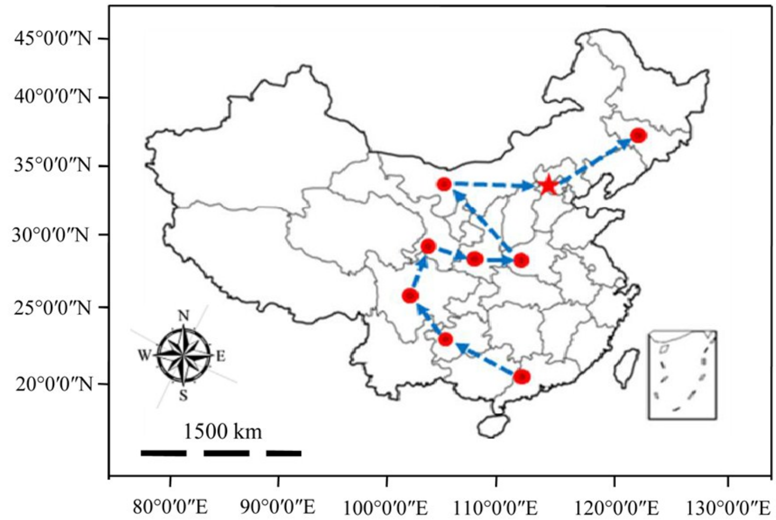

Fig. S1 Ggeographically distributed urban lakes in this study.

Formulas:

$$Chao1 = S_{obs} + \frac{n_1(n_1 - 1)}{2(n_2 + 1)}$$

$$Shannon = -\sum_{i=1}^{S_{obs}} \frac{n_i}{N} \ln \frac{n_i}{N}$$

$S_{obs} = the\ number\ of\ observed\ OTUs n_i = the\ number\ of\ sequences\ in\ OTU\ i$

$N = the\ total\ number\ of\ sequences\ in\ the\ community$

The formula of the *Chao1* index: please refer to the website (http://www.mothur.org/wiki/Chao)

The formula of the Shannon index: please refer to the website (http://www.mothur.org/wiki/Shannon)

The formula of the Simpson index: please refer to the website (http://www.mothur.org/wiki/Simpson)

The formula of the Coverage index: please refer to the website (http://www.mothur.org/wiki/Coverage)