

Pattern of movement of introduced pumpkinseed *Lepomis gibbosus* in artificial, post-excavation lake

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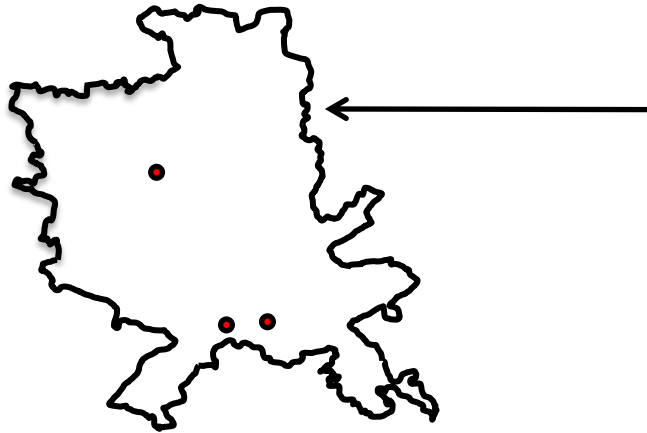


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Pumpkinseed distribution in Europe



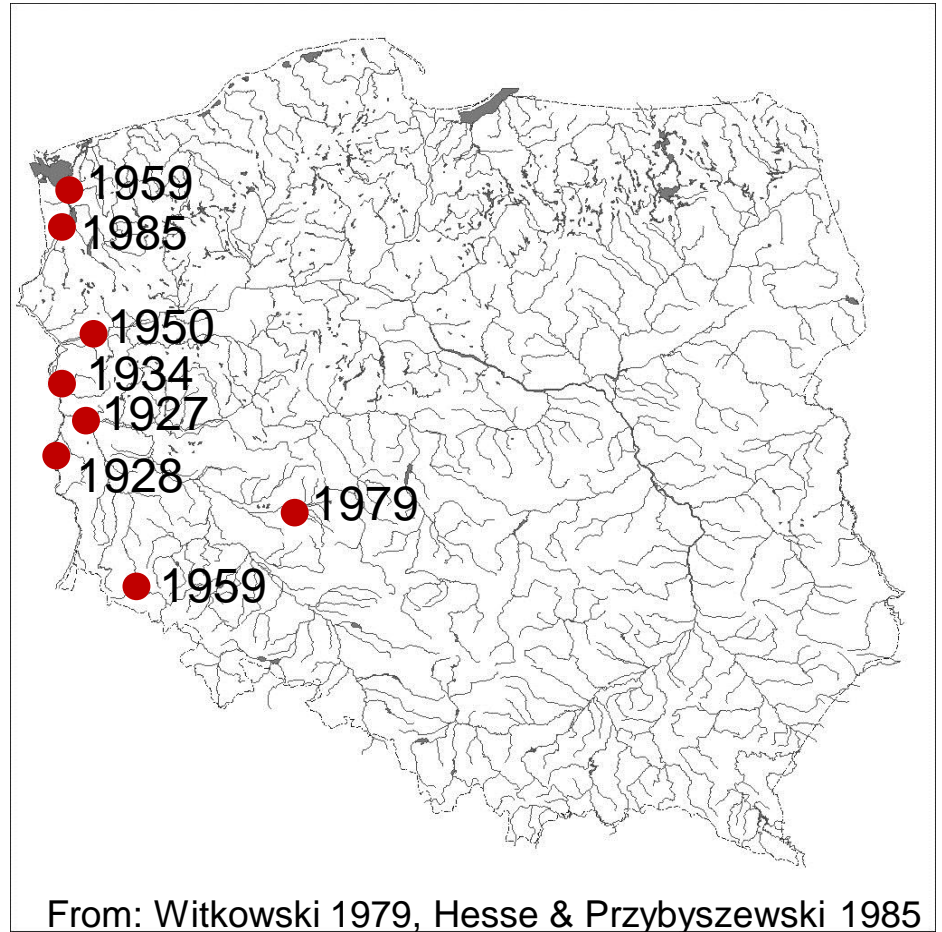
Pumpkinseed distribution in Poland



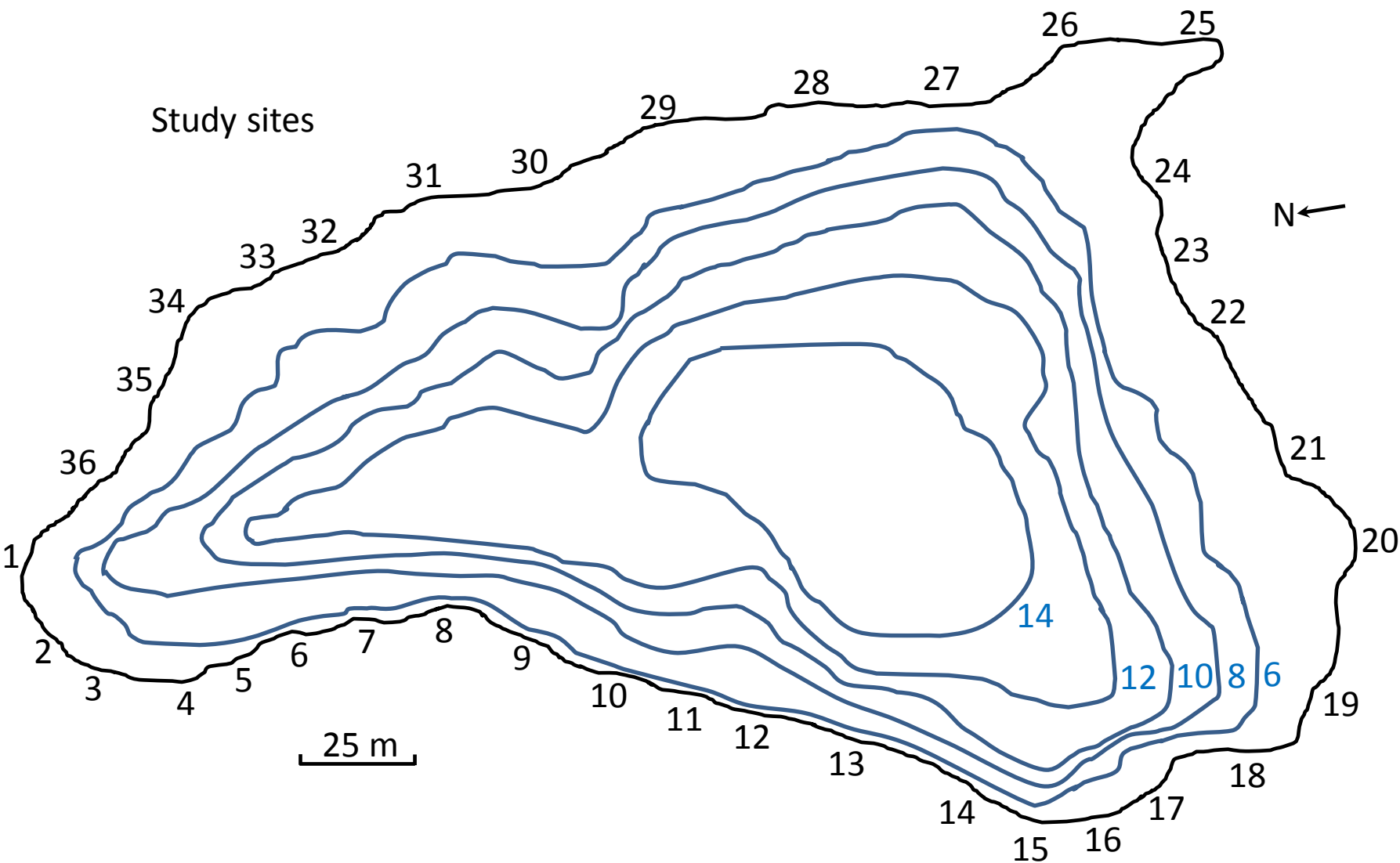
City of Szczecin
(2011-2015, current study)



Emerald Lake



From: Witkowski 1979, Hesse & Przybyszewski 1985



- former chalk mine
- surface area: 2,85 ha
- no fishing allowed

Study sites

No 28

No 27

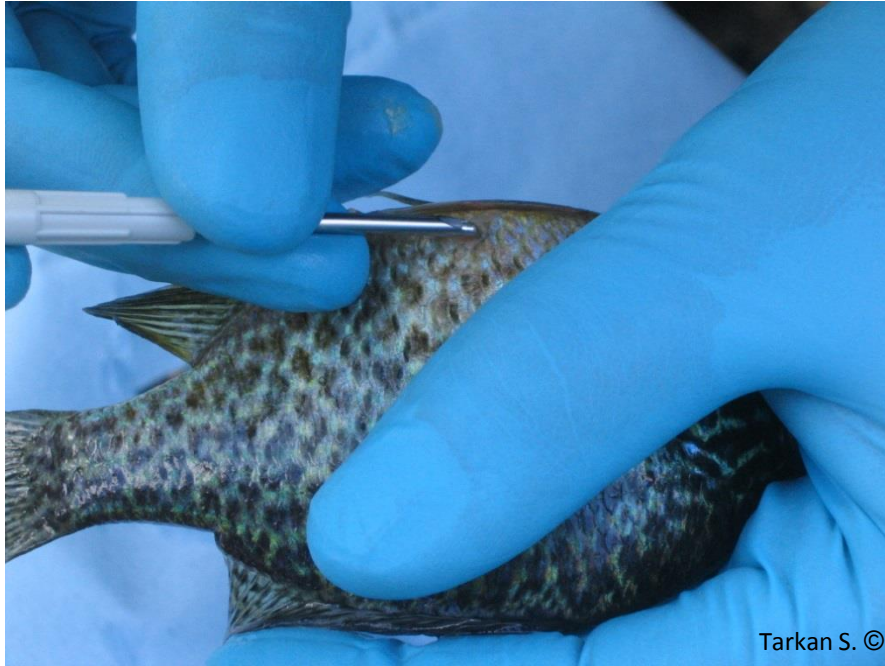
No 26

No 25



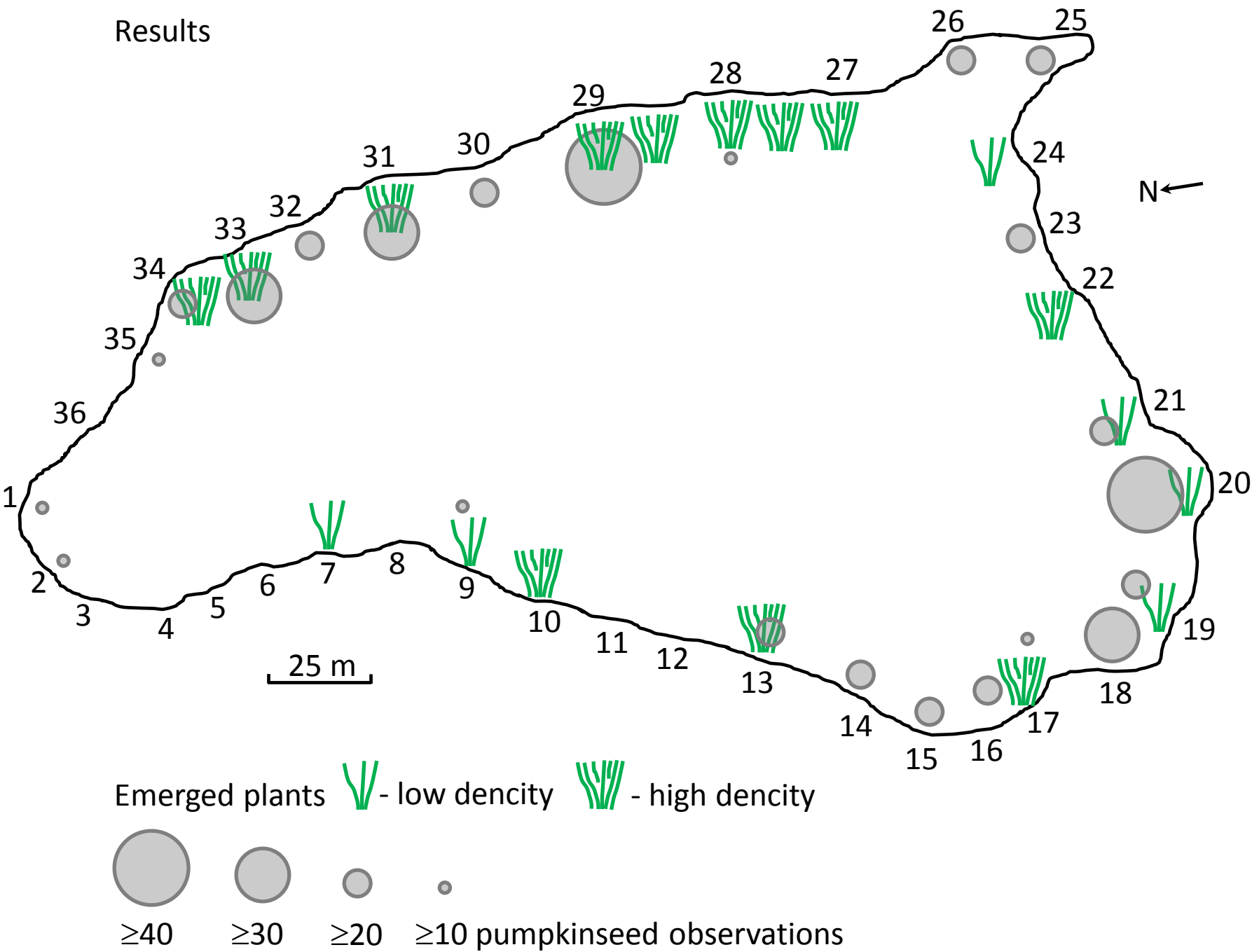
No 24

Methods

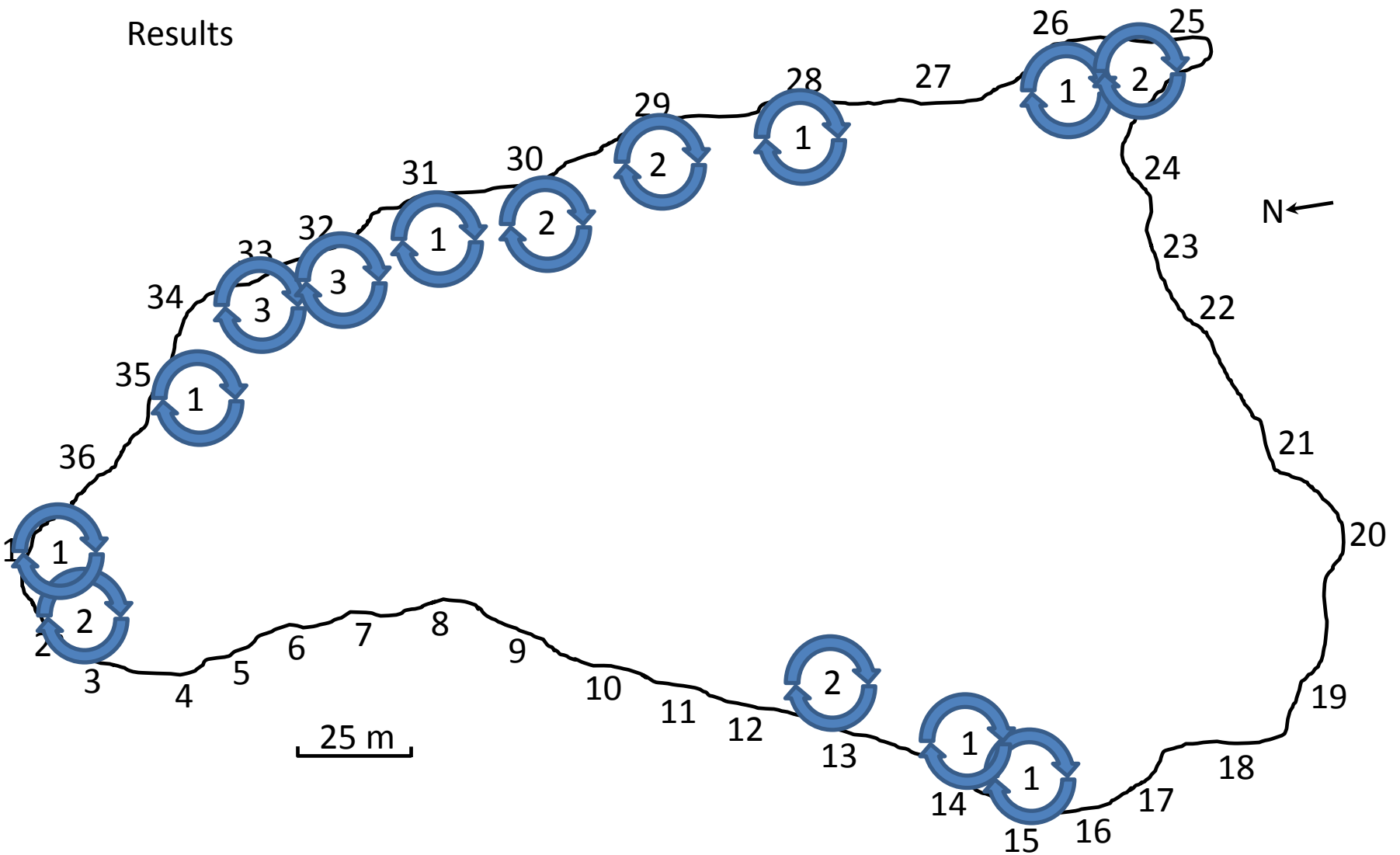


- 359 PIT-tagged pumpkinseed
- 43 fish retrapped (11 males, 11 females, 21 undetermined sex)
- 620 observations over 29 months (May 2012- September 2014)

Results



Results



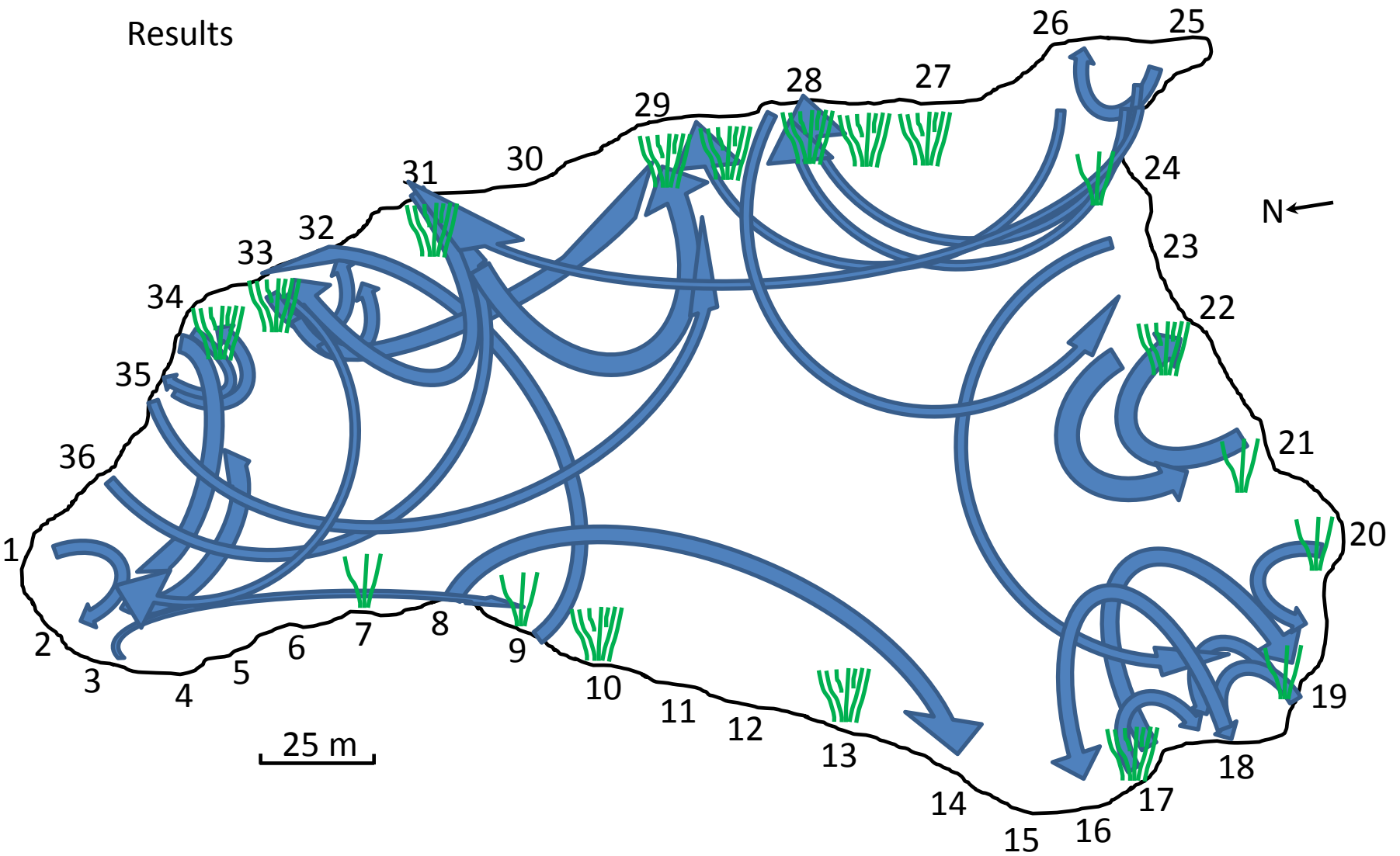
No of sedentary individuals

Females: 6

Males: 2

Undetermined sex: 15

Results



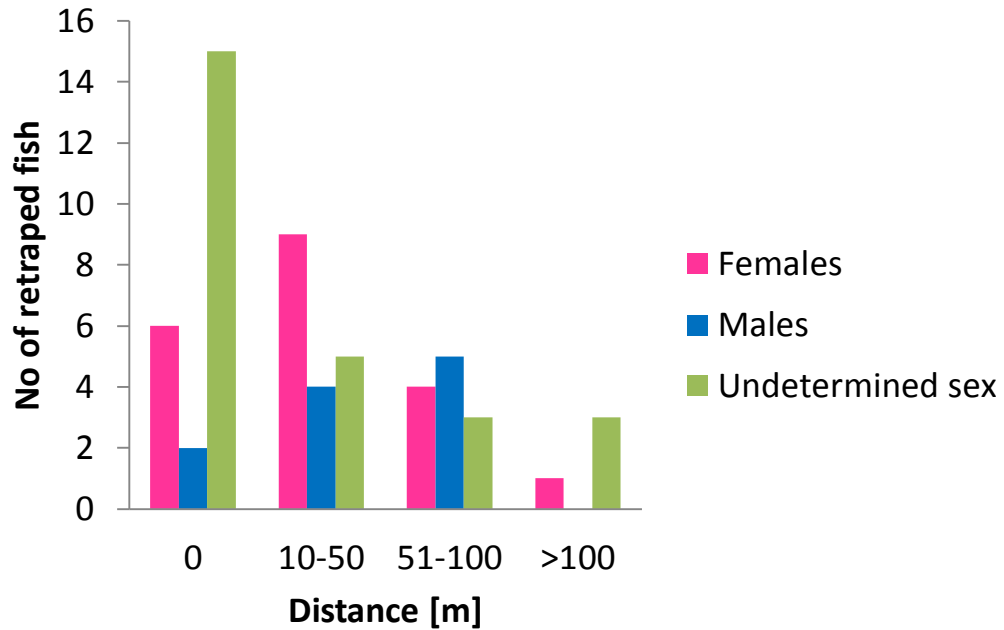
Movement directions

'Top 3'

From: 33, 25, 2

To: 29, 33, 2

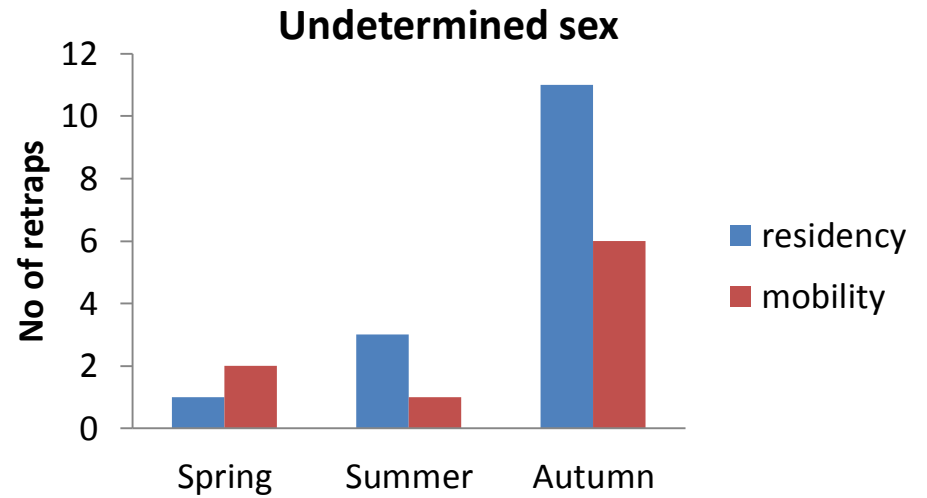
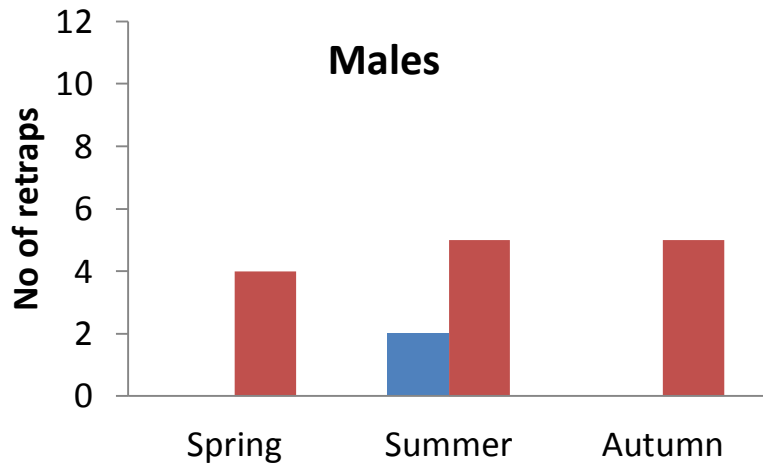
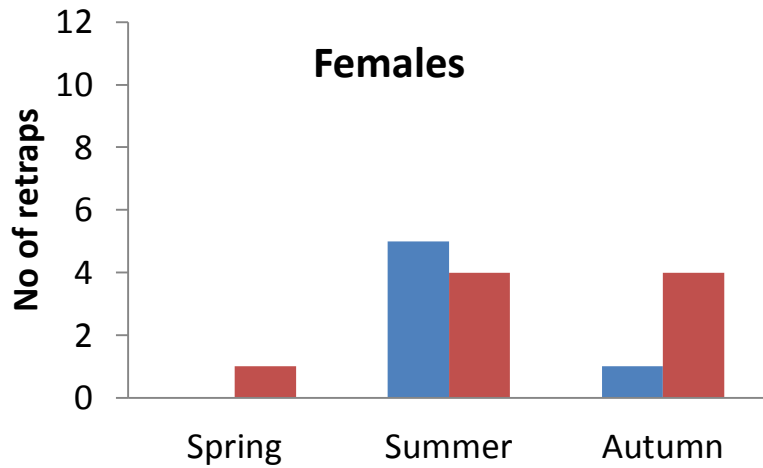
Results



No of retrapped fish in relation to the distance [m] from the previous capture

Single distance [m]:	mean	min	max	Total distance [m]:			
Females	42	0	119	Females	44	0	148
Males	32	0	96	Males	60	17	119
Undetermined sex	28	0	156	Undetermined sex	34	17	119

Results



No of retrapped fish in relation to the season and moving tendency

Conclusions

Residence area of pumpkinseed seems very limited and fish prefer shallow shelves, overgrown with emerged plants

Longitudinal home range may cover the surface of the whole lake

Both, single and total covered distance didn't differ between males and females

Contrary to the published data males didn't show high territoriality over reproductive season