

Environmental sensitivity

Assessment by MOIRA-PLUS

Lakes Øvre-Heimdalsvatn (Norway)

Bracciano (Italy)

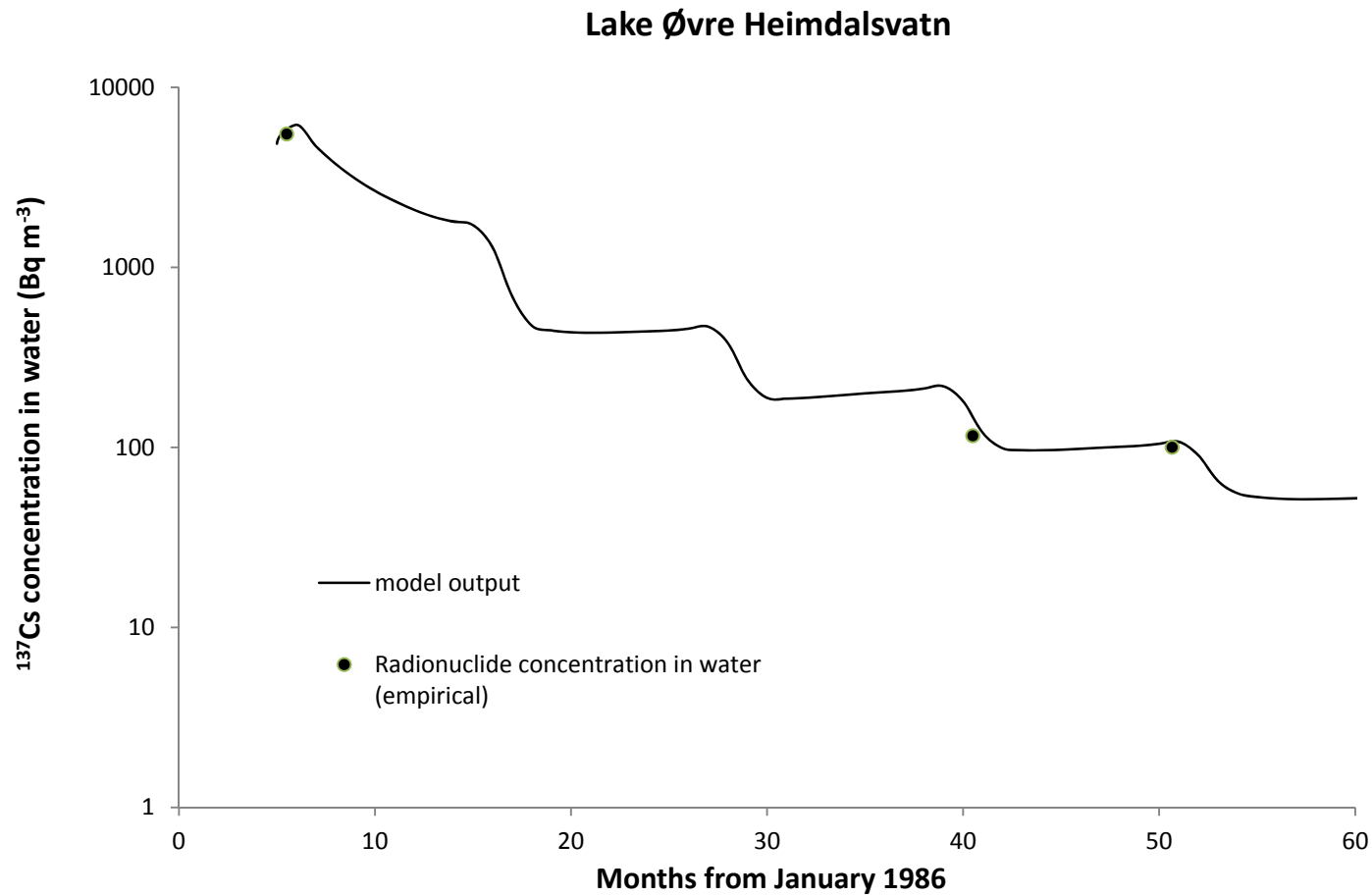
The lakes: Bracciano



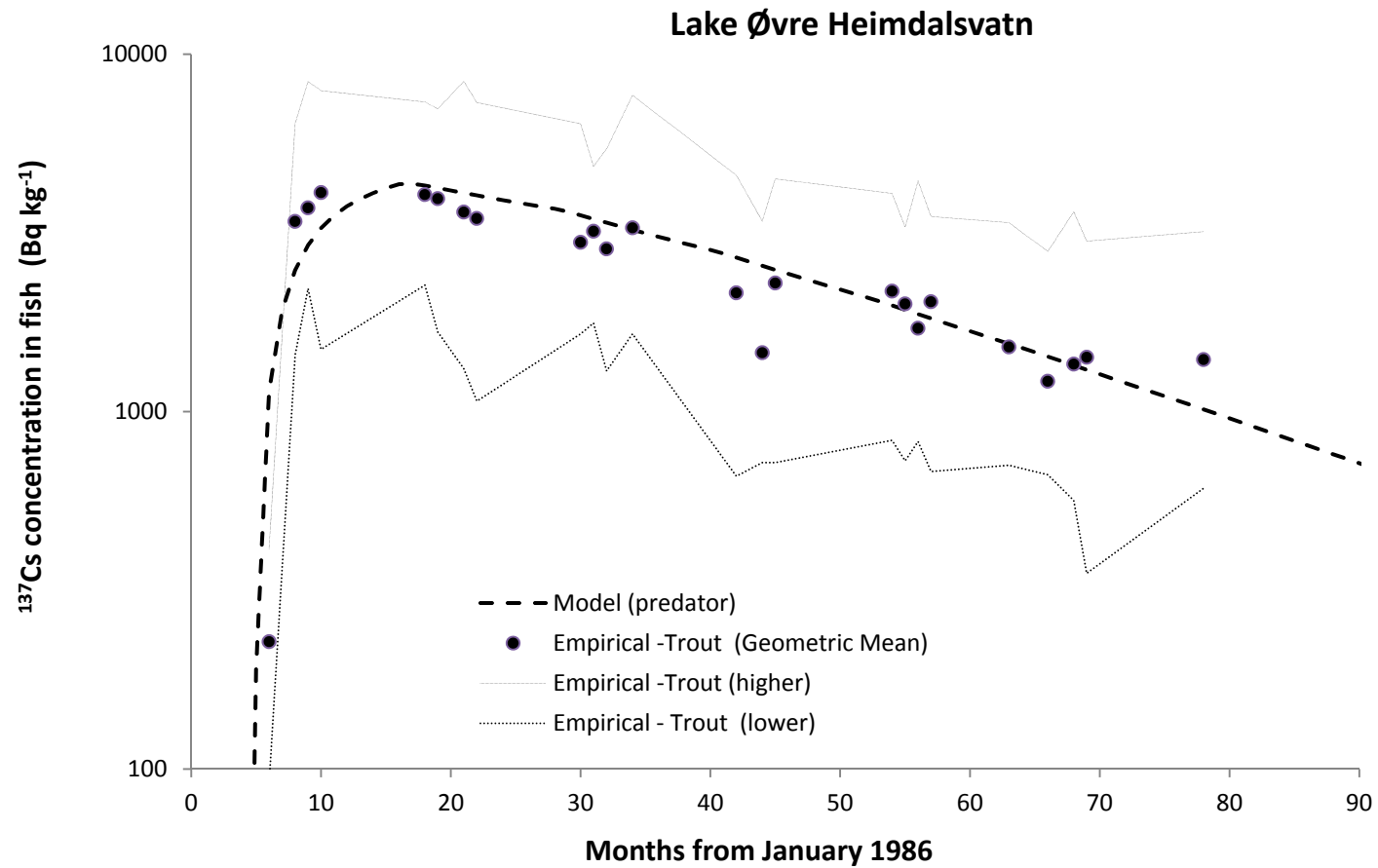
The lakes: Heimdalsvatn



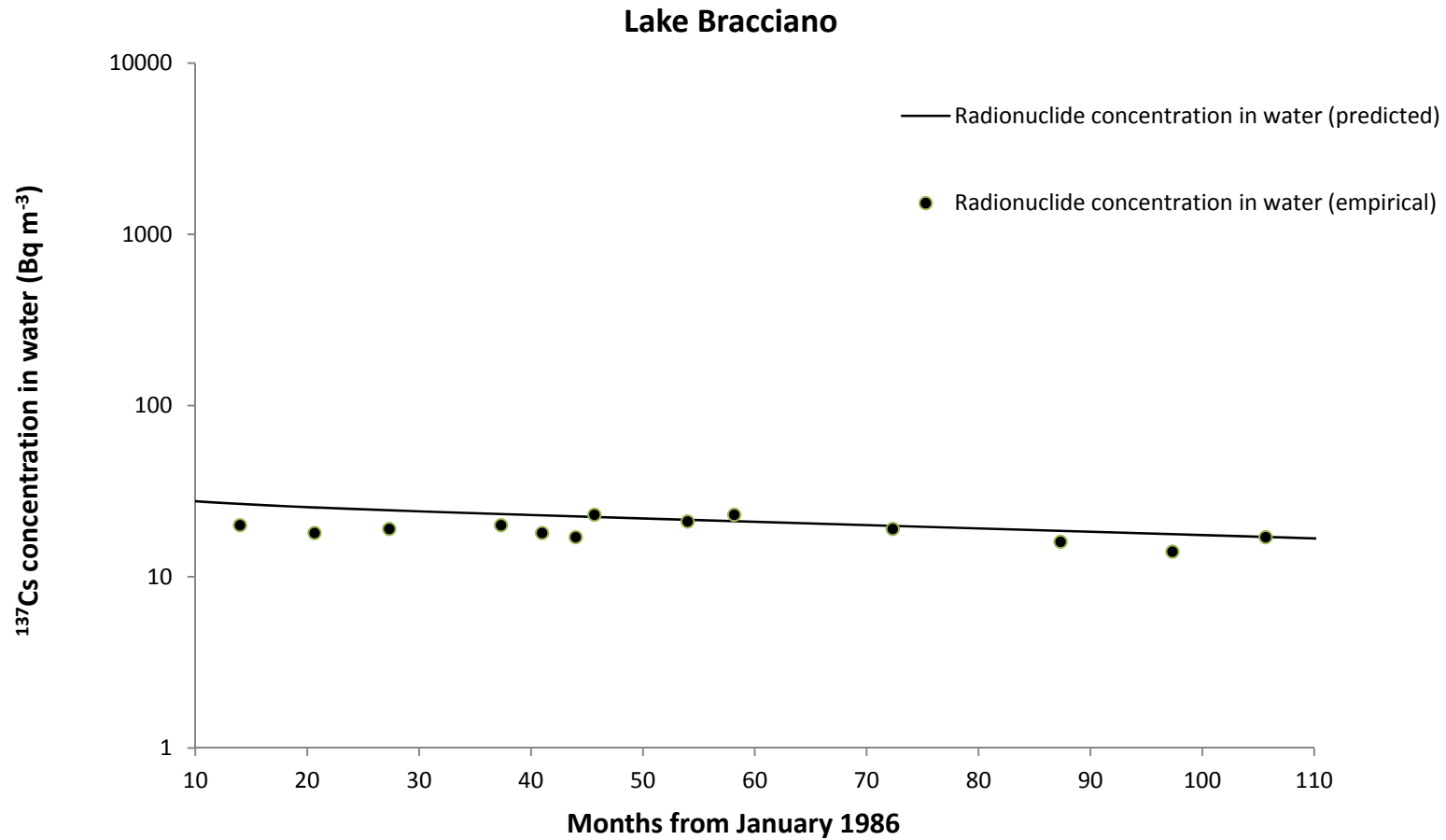
First step: model calibration (data of contamination following the Chernobyl accident)



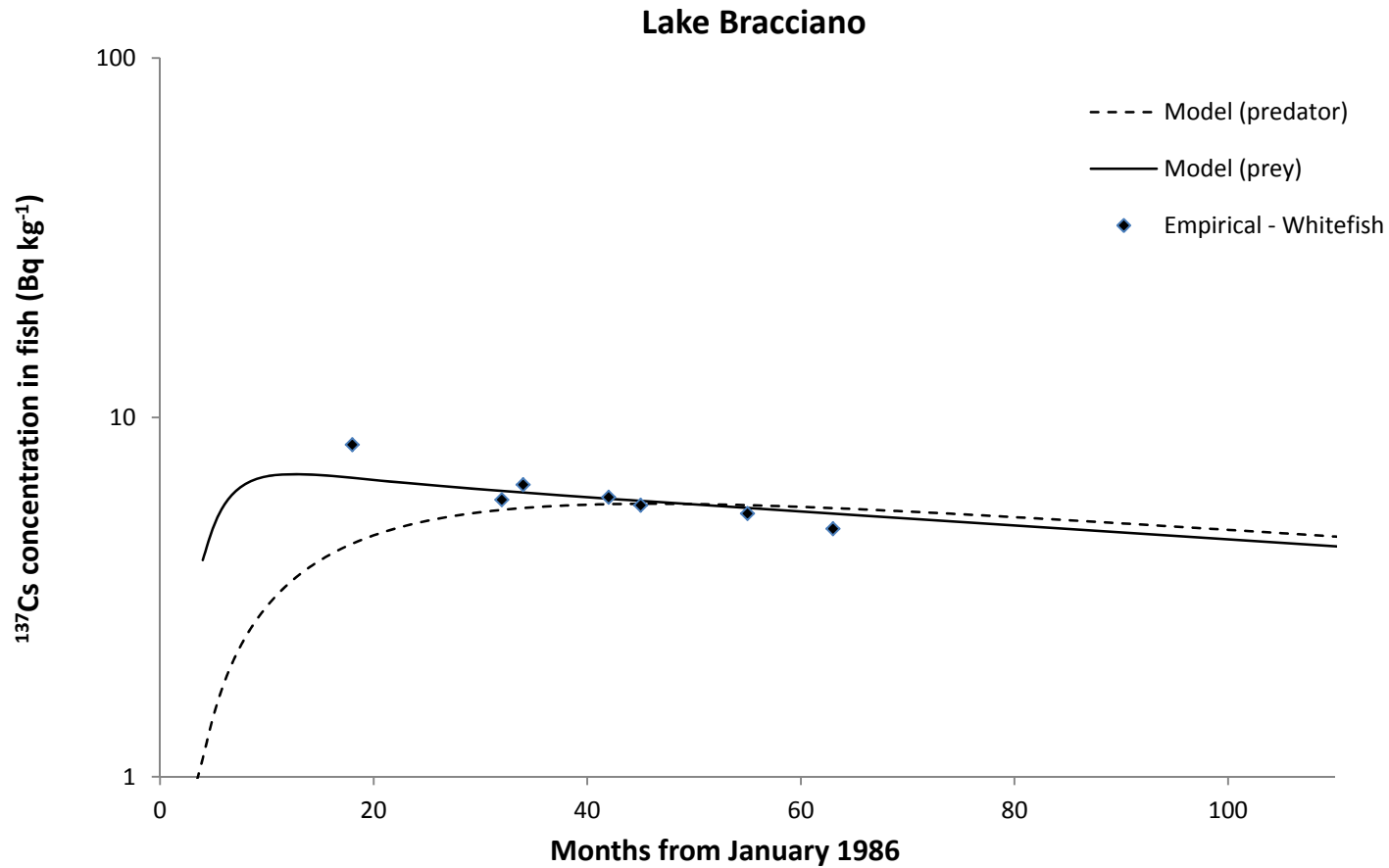
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Population

Age class (years)	Øystre Slidre	Anguillara S. -Bracciano- Manziana- Trevignano R. (1986)
0-5	212	1758
6-15	397	3916
>15	2607	19818
total	3216	25492

Population habits

	Lake Øvre Heimdalsvatn			Lake Bracciano		
Age group	0-5 years	6-15 years	>15 years	0-5 years	6-15 years	>15 years
Fraction time boating	0	0.0005	0.0005	0	0.001	0.001
Fraction time on shore	0.005	0.007	0.005	0.01	0.015	0.01
Fraction time swimming	0.002	0.003	0.003	0.004	0.006	0.006

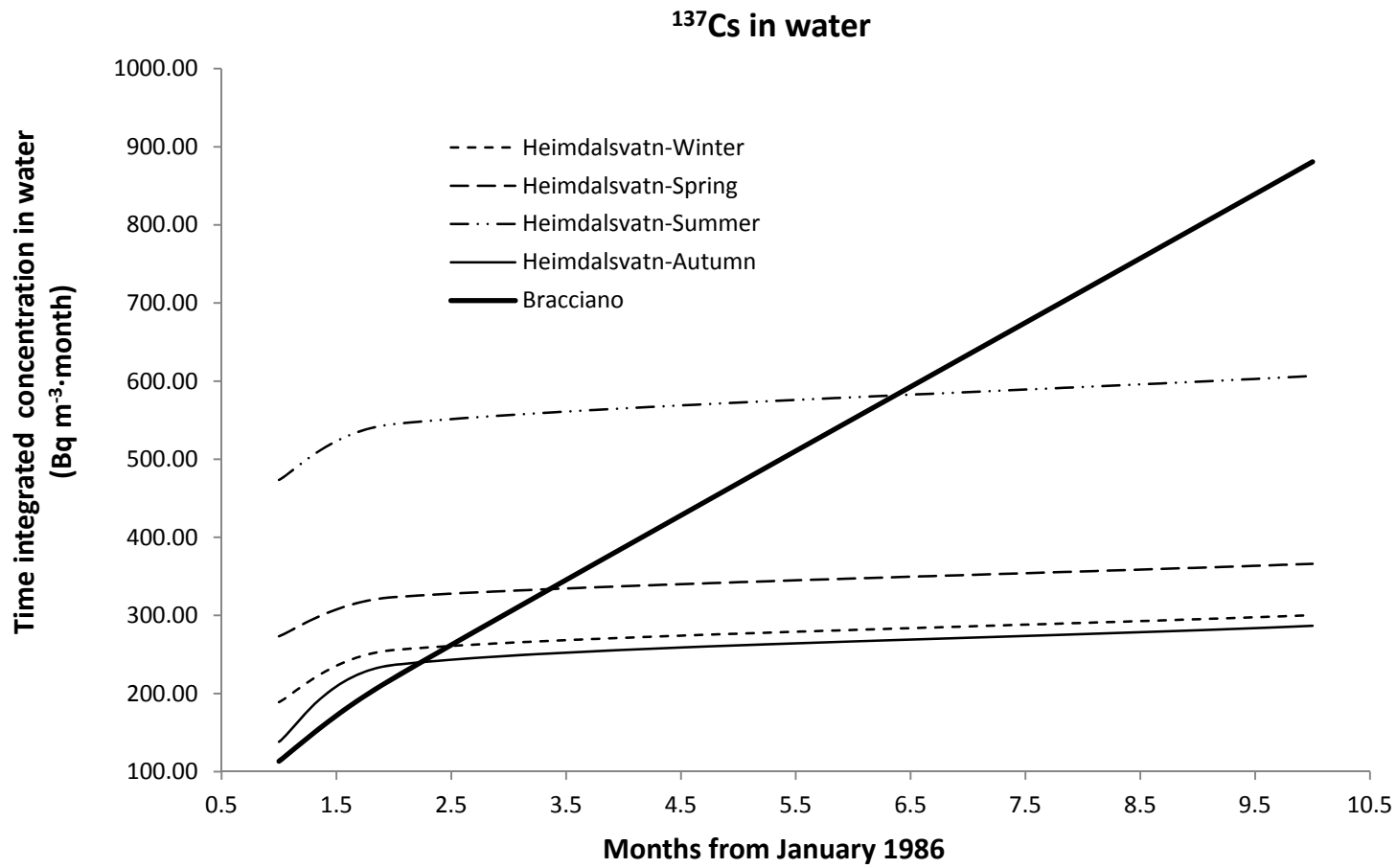
Consumption of animal products

Product	Consumption (kg year ⁻¹ – liter year ⁻¹)
Cow's milk	230
Cow's meat	15
Sheep's milk	50
Sheep's meat	3
Pork	11
Fish (fresh water)	5
Cereals	130
Legumes	25
Roots	55
Vegetables	50

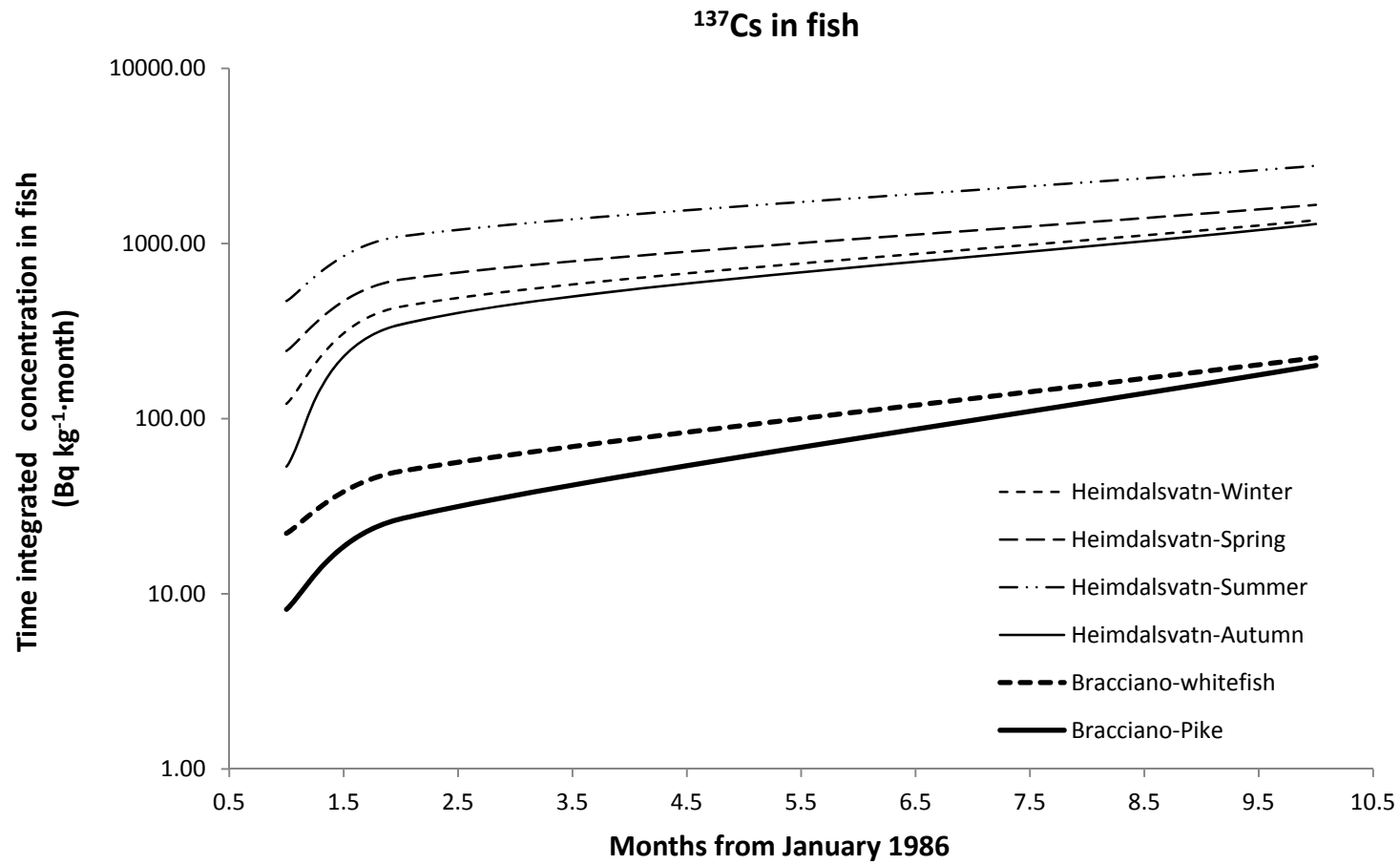
Other socio-economic data

	Lake Øvre Heimdalsvatn	Lake Bracciano
Period of fishing	June-September	Almost the entire year
Beginning of growing season for crops	April	March
Time of harvest	October	July
Month irrigation starts	April	June
Month irrigation ends	July	September

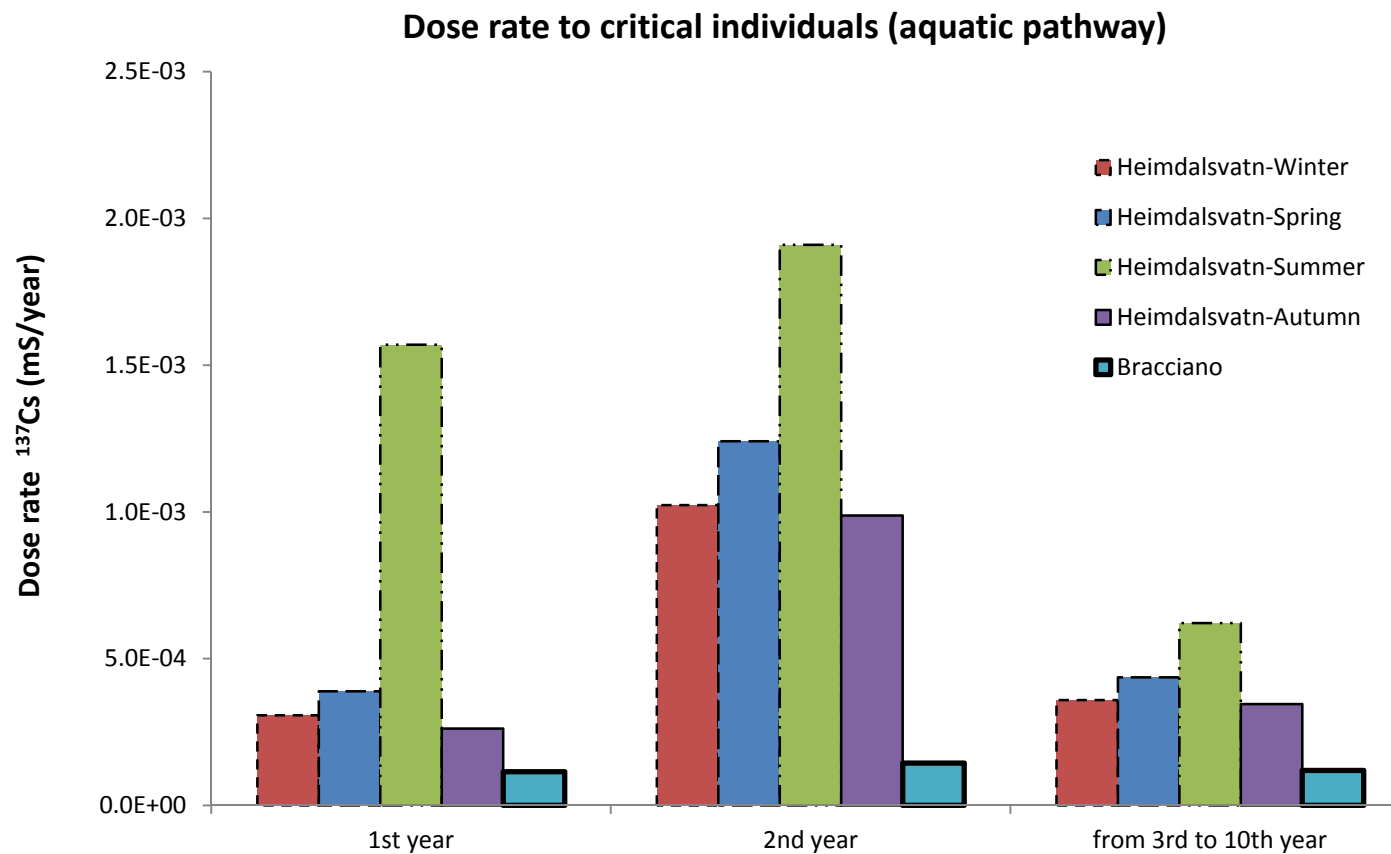
Results T.I.C. in water



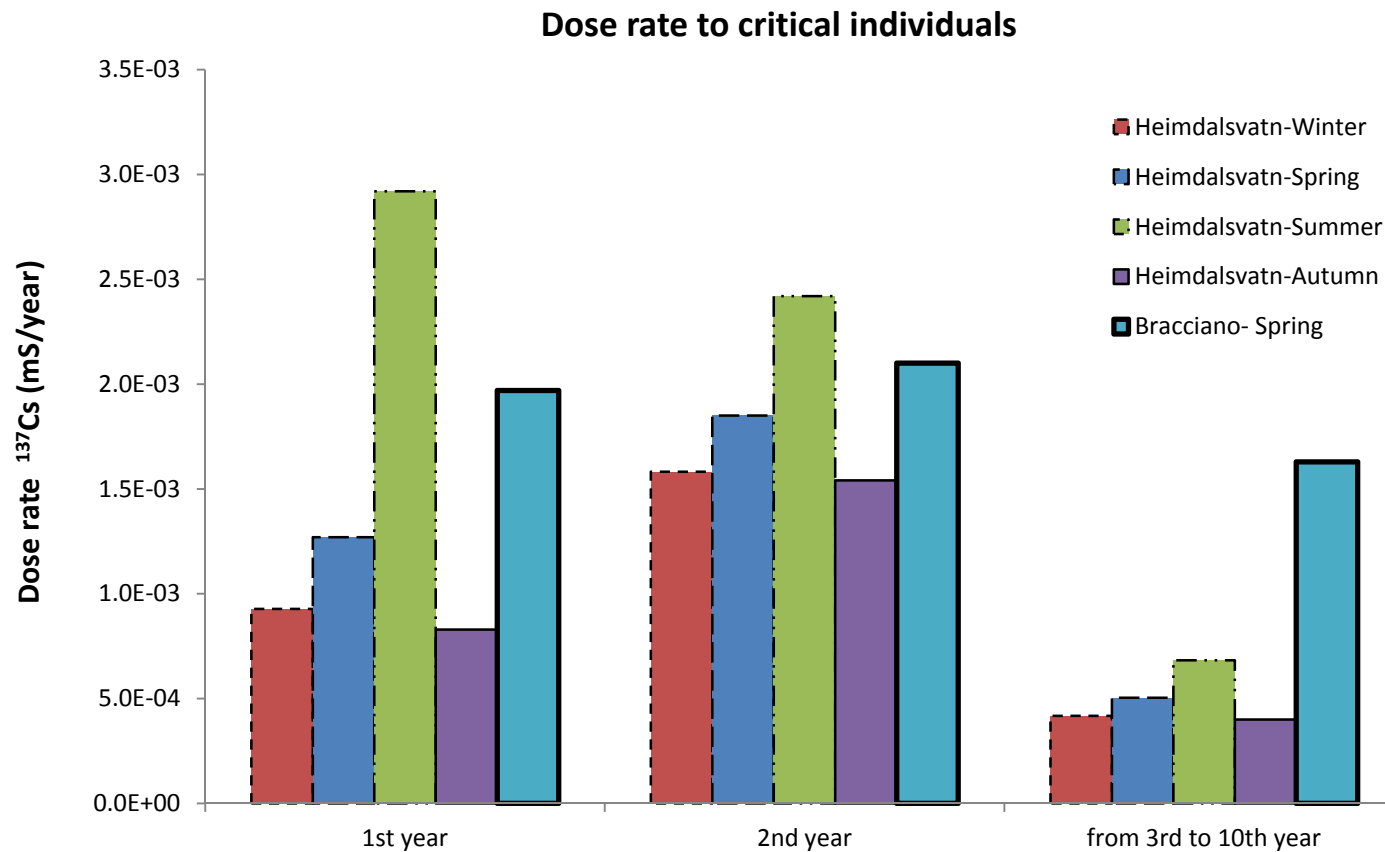
Results T.I.C. in fish



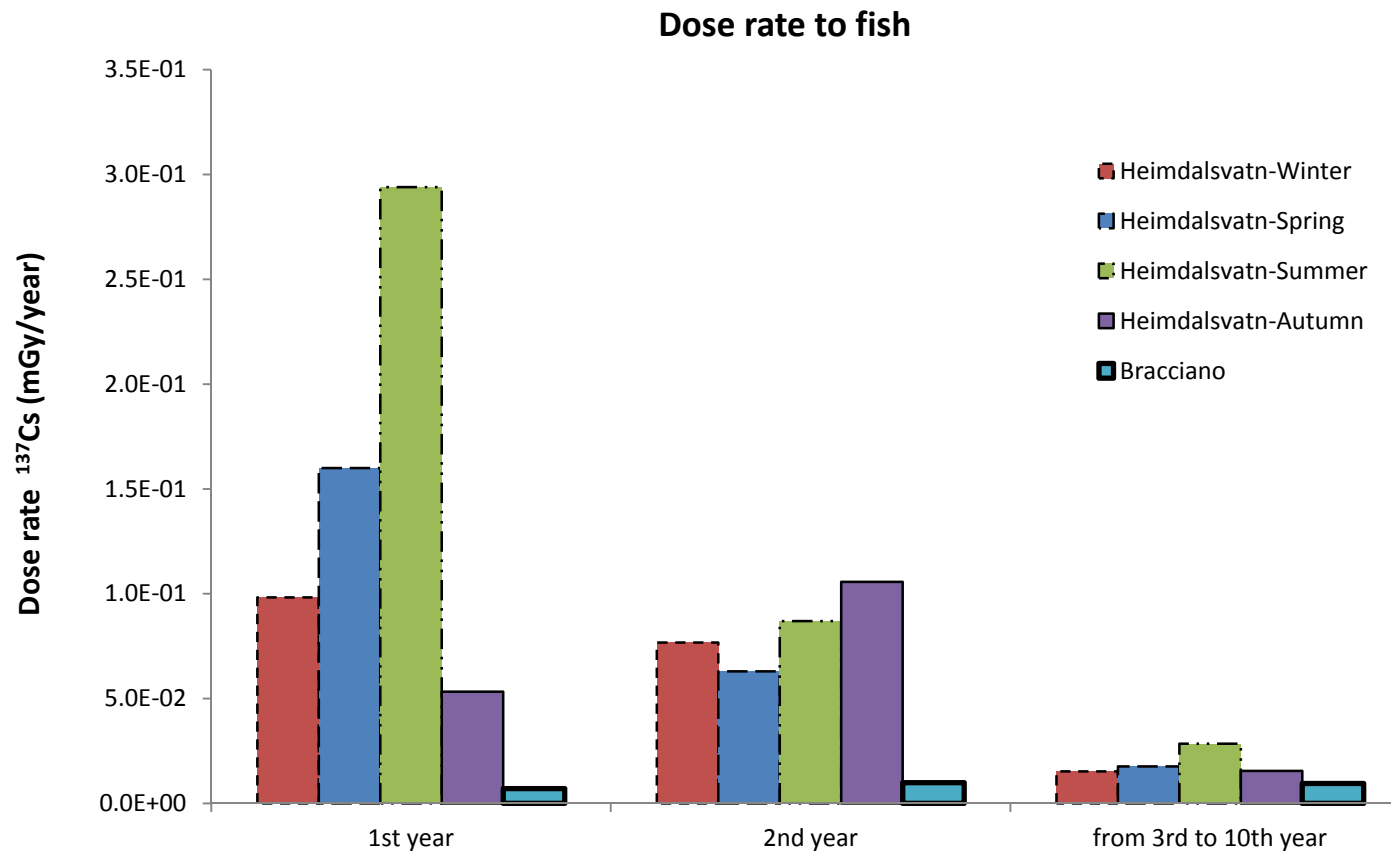
Results: Dose to individuals – aquatic pathway



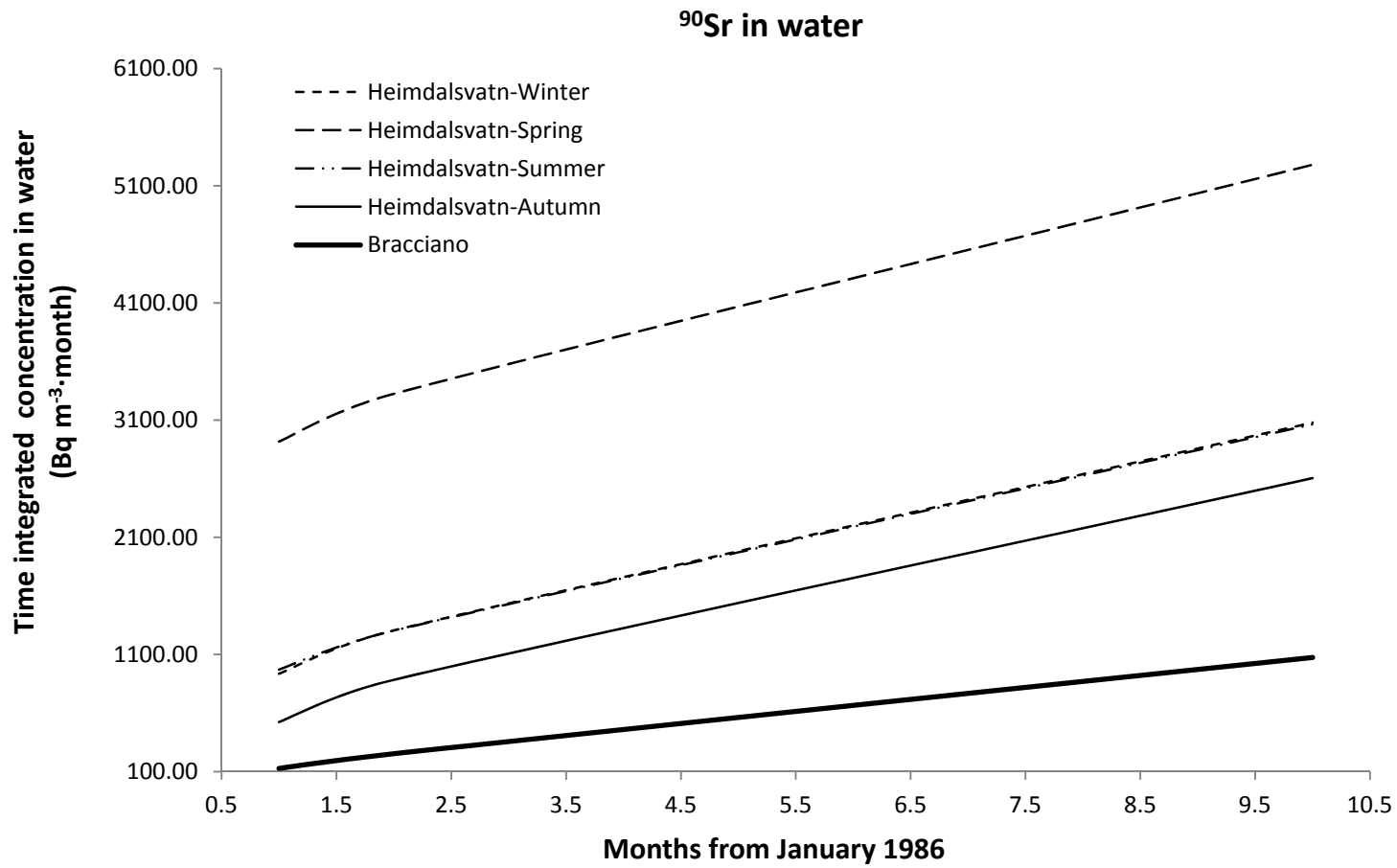
Results: Dose to individuals – aquatic and terrestrial pathways



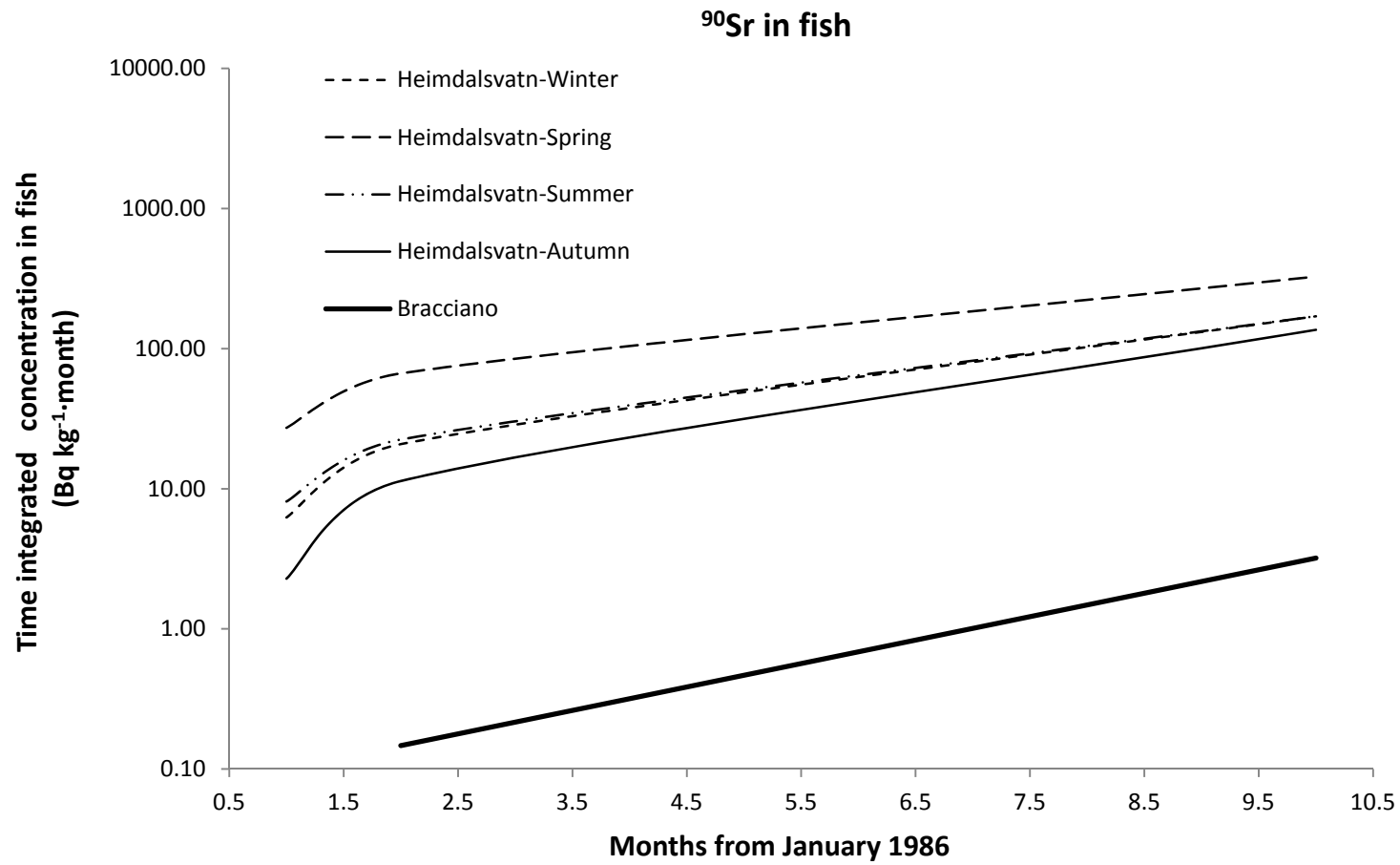
Results: Dose to fish



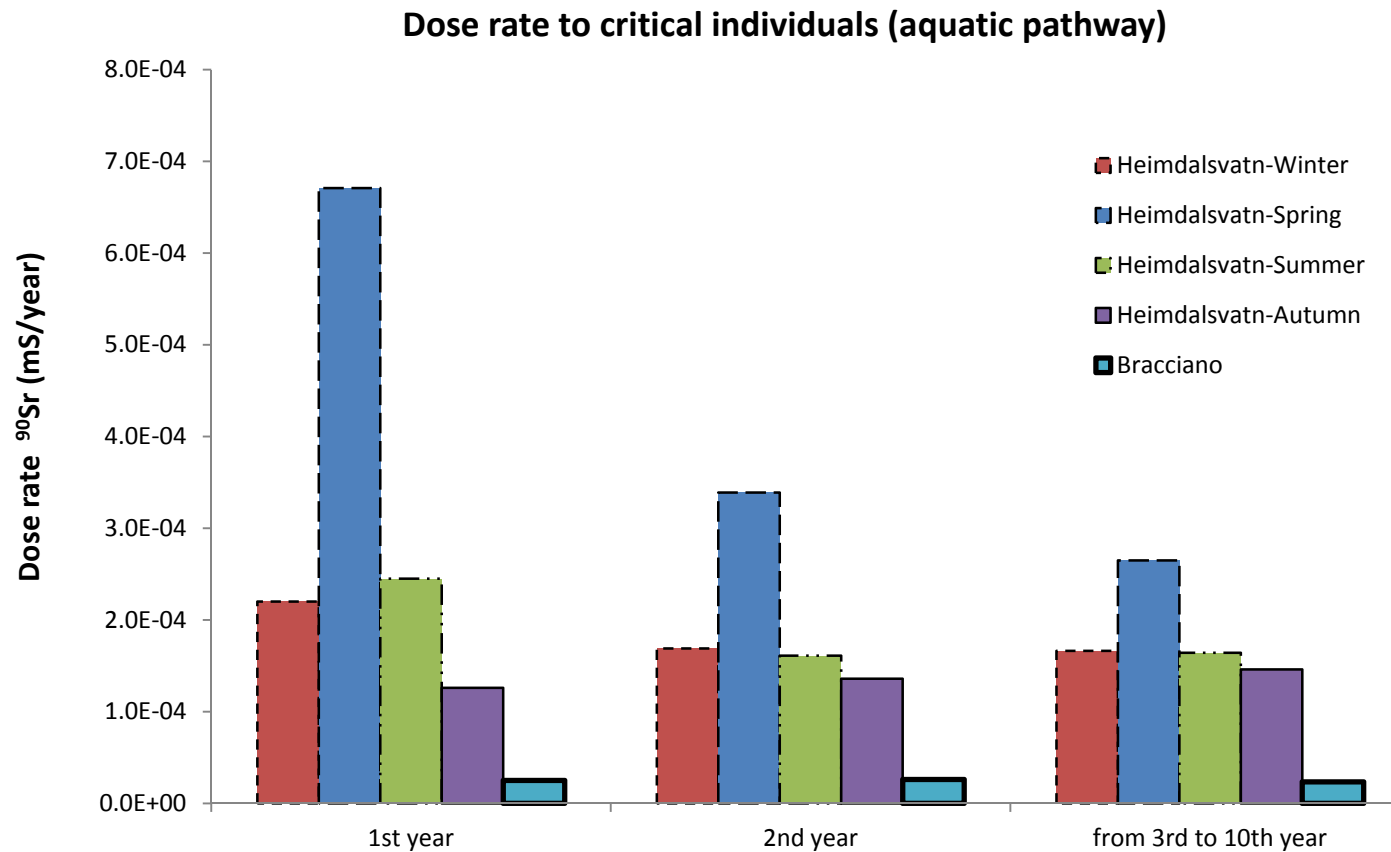
Results T.I.C. in water



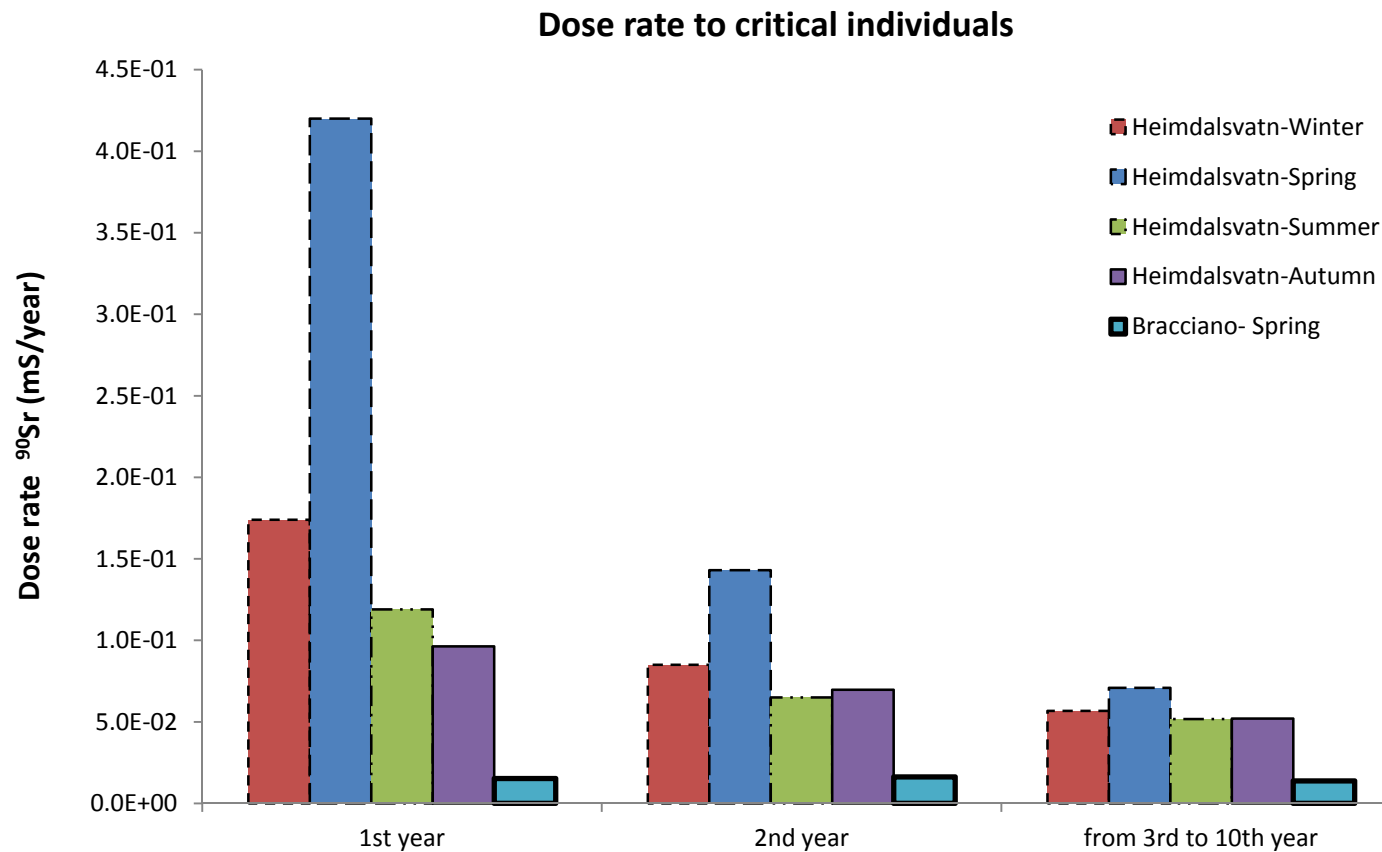
Results T.I.C. in fish



Results: Dose to individuals – aquatic pathway



Results: Dose to individuals – aquatic and terrestrial pathways



Results: Dose to fish

