

IAN JOHNSTON (ijohnston@scotsman.com)

August 07, 2007

GLOBAL warming could release a vast amount of DNA from polar ice into the oceans over the next century, resulting in major changes to the marine food chain, the researchers said.

The discovery that micro-organisms can survive up to 1.1 million years in the ice means historic DNA will be affecting the tiny beings that are the fundamental building blocks of all life.

However, it is not known whether this will have a positive or negative effect. Professor Paul Falkowski, of Rutgers University, New Jersey, said: "Icebergs are big gene popsicles (ice lollies). There must be billions of pieces of DNA melting off the icebergs going into the ocean and some of them will be incorporated into microbes. It's just a way of hastening evolution.

"Microbes rule. It's microbes that run this planet. The way that microbial evolution can be changed by massive glacier melting is pretty profound. Probably it will mean that microbial ecology in the ocean will alter the food-web structure in a way I don't fully understand, that no-one can understand yet.

"There could be positive feedbacks or negative feedbacks; we don't know."

