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PRACTICAL BIOLOGICAL INDICATORS OF HUMAN IMPACTS IN ANTARCTICA

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Forty-four participants from fourteen countries gathered for two and a half days to discuss the status of biological indicators of human impact in Antarctica. These deliberations were the most recent step in a series of workshops and conferences convened to address national and international requirements for monitoring and minimization of potential human impacts in Antarctica. The workshop participants agreed to a number of recommendations:

Biological indicators of human impact can only be understood when closely integrated with a suite of non-biological measurements.

Long-term biological data sets are fundamental to establishing the natural variability of biological indicators of change.

Temperate region protocols may be adaptable or customized for use in Antarctica.

Data quality objectives should guide the choice of biological indicators for monitoring programs.

A minimum set of common monitoring parameters to measure potential biological impacts of station operations should be agreed.

Robust numerical and quantitative models of natural systems are needed.

All monitoring data should be made widely available through existing National Data Centres.

The coordination and exchange of information on monitoring should be improved.

The monitoring of human impacts must become a routine part of Antarctic station operations.

Monitoring programs require an unambiguous definition of a “natural”, control or original state to identify change(s) due to human intervention and to account for natural variability in biological systems.