

Ecological impact of the “



Between 80 000 and 150 000 marine birds wintering in the Bay of Biscay were killed during the “Erika” oil spill. Three complementary studies were conducted to investigate the geographic origins of these birds. The common guillemot, *Uria aalge*, represented more than 80% of the oiled birds and these studies thus focused primarily on this species. Analyses of 184 ring recoveries and biometry of 1851 corpses indicated that guillemots originated from a large geographic area, including colonies from across the British Isles and the North Sea, along with more northern localities. However, the majority of individuals came from colonies located between western Scotland and the Celtic Sea. The third study, based on a population genetic approach using microsatellite markers (samples from dead oiled birds and from more than 600 birds caught in 19 breeding colonies), showed little genetic differentiation among north-eastern Atlantic guillemot colonies. This result limits the ability to identify the geographic origins of the birds using only DNA samples, but reveals a significant amount of gene flow among colonies. Overall, results indicate the large spatial scale of the oil spill's impact and underline the usefulness of combining multiple approaches to assess the local and regional effects of such accidents.

Auteurs du document : Bernard Cadiou, Léa Riffaut, Karen D. McCoy, Jérôme Cabelguen, Matthieu Fortin, Guillaume Gélinaud, Alexandra Le Roch, Claire Tirard, Thierry Boulonier

Obtenir le document : EDP Sciences

Mots clés : Oil spill, Ring recoveries, Biometrics, Genetics, Seabird, Atlantic Ocean

Thème (issu du Text Mining) : MILIEU NATUREL, SCIENCES EXACTES SCIENCES HUMAINES

Date : 2004-10-15

Format : text/xml

Source : <https://doi.org/10.1051/alr:2004036>

Langue : Anglais

Télécharger les documents : <https://www.alr-journal.org/10.1051/alr:2004036/pdf>

Permalien : <https://www.documentation.eauetbiodiversite.fr/notice/ecological-impact-of-the0>

Evaluer cette notice: