

THE *TRICOLOR* OIL SPILL: AN INCIDENT THAT SHOULD HAVE BEEN PREVENTED

Winter 2002/2003 will be remembered as a black season by those unfortunate enough to become involved in a series of oil spills that killed many tens of thousands of seabirds in West European waters. For most, the *Prestige* spill was by far the most dramatic event and this incident received most media attention. Overshadowed by the *Prestige* in many respects, but arguably at least as harmful to European seabirds, was the *Tricolor* spill that took place in the French Channel. This special issue of *Atlantic Seabirds* is a summary of what we now know about the seabirds killed: how many were affected, what species and of what age they were and their possible breeding origins. It also contains descriptions of the event that made us wonder why it happened in the first place. It attempts to bring together information vital for a proper evaluation of an oil spill and should provide baseline data for future work. This issue has been produced with greatly appreciated financial support from Vogelbescherming Nederland, the Dutch Birdlife partner. As usual, however, most of the work was done by volunteers at their own expense, people concerned enough to become involved.

THE INCIDENT IN BRIEF

The *Tricolor* was not an oil tanker but a freighter carrying cars. The ship sank after a collision in one of the busiest parts of the French Channel, but did not leak much oil initially. Despite buoys and other measures to warn passing vessels, a German coaster and a Turkish tanker collided with the wreck, but these were refloated. Francis Kerckhof, Patrick Roose and Jan Haelters describe what went wrong in their contribution to this issue and indicate that the *Tricolor* only started to leak seriously following salvage operations in January, about a month after the *Tricolor* sank. This salvage work may have been necessary to prevent further collisions between passing vessels and a hazard in a busy shipping lane but had they be postponed until, say, May 2003, the risk to wintering seabirds, most of whom would have vacated the area by May, would have been considerably less. Stienen *et al.* describe the event as it happened in Belgium and their attempts to investigate the effect of the spill by offshore studies in their well-surveyed coastal waters.

SEABIRDS CONTAMINATED WITH OIL

For people who had recently assisted with the impact assessment of the *Prestige* oil spill, reports of a mass stranding of heavily oiled seabirds in the low countries was the last thing that was needed. Despite there perhaps being more experience in oil spill response than in Spain, the initial chaos was substantial and counter-productive steps were taken by regional authorities, such as an immediate removal of oil and oiled birds from beaches before scientists could document the event. One confounding factor was that three (and almost certainly four) countries were involved, with mass strandings occurring almost simultaneously in France, Belgium and The Netherlands and probably South-East England. Despite previous good co-operation between seabird biologists in France, Belgium and The Netherlands, at the time everybody was so busy with the spill that close contacts were only re-established after the event. A post-spill conference in Zeeland in October 2003 and this issue of *Atlantic Seabirds* are the results. It is clear that each and every team approached the problem differently, but partly for good reasons. In France, nearly all casualties were alive when they came ashore. Belgium was overwhelmed by live birds along their coastline at first and was then flooded with dead casualties. In The Netherlands, the mass-stranding was highly localized but most casualties were dead.

MAINLY MATURE BIRDS KILLED

How large the damage has been, we now know quite precisely. Funny enough, that question is asked continuously when it cannot be answered and when all hands are needed on deck: during the spill. Now that the dust has settled, with the autopsy results having been analysed, now that the few rings have been read and processed and with all counts checked and corrected, in fact now everyone has lost interest in the incident, do we have an idea of the damage done: The *Tricolor* killed rather few species, mainly Razorbills and Guillemots, just as the *Prestige*, but as many as 19,000 individuals were found ashore.

	found alive	found dead	Total
N France	2100	3400	5500
Belgium	5300	4200	9500
The Netherlands	700	3300	4000
	8100	10,900	19,000

One significant difference with the *Prestige* casualties was that the auks wintering in the Channel were mainly adults in prime condition (most Common

Guillemots and Razorbills oiled in Spain were first-year birds), so that a more immediate effect on breeding populations might be detected. Biometrics (Kees Camphuysen & Mardik Leopold) and ringing recoveries (Mark Grantham) both suggested that most casualties came from colonies along the east coast of Scotland. Although the return rate of adult Common Guillemots on the Isle of May (Firth of Forth) was below average in 2003 (Mavor *et al.* 2004), no abrupt and substantial declines in numbers were detected at colonies in either eastern England or eastern Scotland in 2003. However, changing fortunes of Common Guillemots and other seabirds in the north-western North Sea for reasons other than oil pollution may “mask” or obscure mass-mortality events such as the Tricolor spill.

IMPACT ASSESSMENT

The work reported in this issue are fruits of the badly needed ‘Impact Assessment’ of an oil spill, which should be conducted in any incident of this kind. Unfortunately, such impact assessments are still mostly conducted by private individuals concerned enough to drop their normal work and simply do it. In several recent spills, the task of a proper impact assessment has been neglected and the badly needed scientists, government organisations and NGOs often seem too busy to participate or take charge. Apparently, biological impact assessment is considered less important than simply cleaning beaches, and the costs involved in autopsies, no matter how trivial, are still less amenable to compensation from insurers than physical cleanup or rehabilitation efforts. The ‘polluter pays’ is a good principle, and understanding the potential biological impact of an oil spill should be a part of that payment.

From working in several of the recent oil incidents, it became clear that there is an increasing tendency by the general public, authorities and news media to believe that oil spills don’t do long-term damage and that oil-related mortality does not harm seabird populations. These arguments have been used as an excuse by organizations and individuals who do not wish to become involved, and may be fuelled by scientists who cannot detect any long-term effects. These arguments, no matter how slender their factual basis, are happily copied by authorities and insurance companies so that they need not feel utterly concerned. However, in the absence of a rigorous impact assessment (as in most incidents) and with little scientific interest in the aftermath of oil spills, it is impossible to assess the true effects of oil pollution. Any mass-kill of seabirds as a result of ignorance, indifference or bad luck at sea should be properly studied, so that future incidents may be prevented or at least that the impact on wildlife be minimized. At present, the primary concern of most governments is to minimise coastal pollution at all cost, and the *Prestige* spill was a disastrous

example of the failure of such an approach. In the *Tricolor* case, the local presence of internationally important concentrations of seabirds was not considered when salvage operations were planned, and this issue is a consequence of that lack of forethought and planning. The *Tricolor* spill could and should have been prevented.

BONUS

No one would hope for an oil spill to take place, but mass mortality incidents such as the kill caused by the *Tricolor* spill do provide useful biological material that should not be wasted. The heavily oiled birds found dead in The Netherlands, that were transported to the Royal NIOZ laboratory for proper identification and ageing, were used to study the winter diets of the most common casualties: Razorbills and Common Guillemots. Ouwehand *et al.* report on the results of this study and took the opportunity to compare the diet of two rather similar, but ecologically quite different seabirds wintering in the Southern Bight. The *Tricolor* provided a rare opportunity to study the diet of these two species in winter from exactly the same location and at the same time of year.

Kees Camphuysen
Editor *Atlantic Seabirds*

Mavor R.A., Parsons M., Heubeck M., & Schmitt S. 2004. Seabird numbers and breeding success in Britain and Ireland, 2003. UK Nature Conservation No. 28, Joint Nature Conservation Committee, Peterborough, 100pp.