

Marine debris in European shag's nests as indicator of marine pollution



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different seabird species use marine debris collected at sea or on land as nest materials



also studied in northern gannet
but shags are more common
with much more colonies



from
Votier SC, Archibald K, Morgan G & Morgan L 2011
The use of plastic debris as nesting material by a colonial seabird and associated entanglement mortality.
Marine Pollution Bulletin 62: 168-172

abundance classes according to the number of items



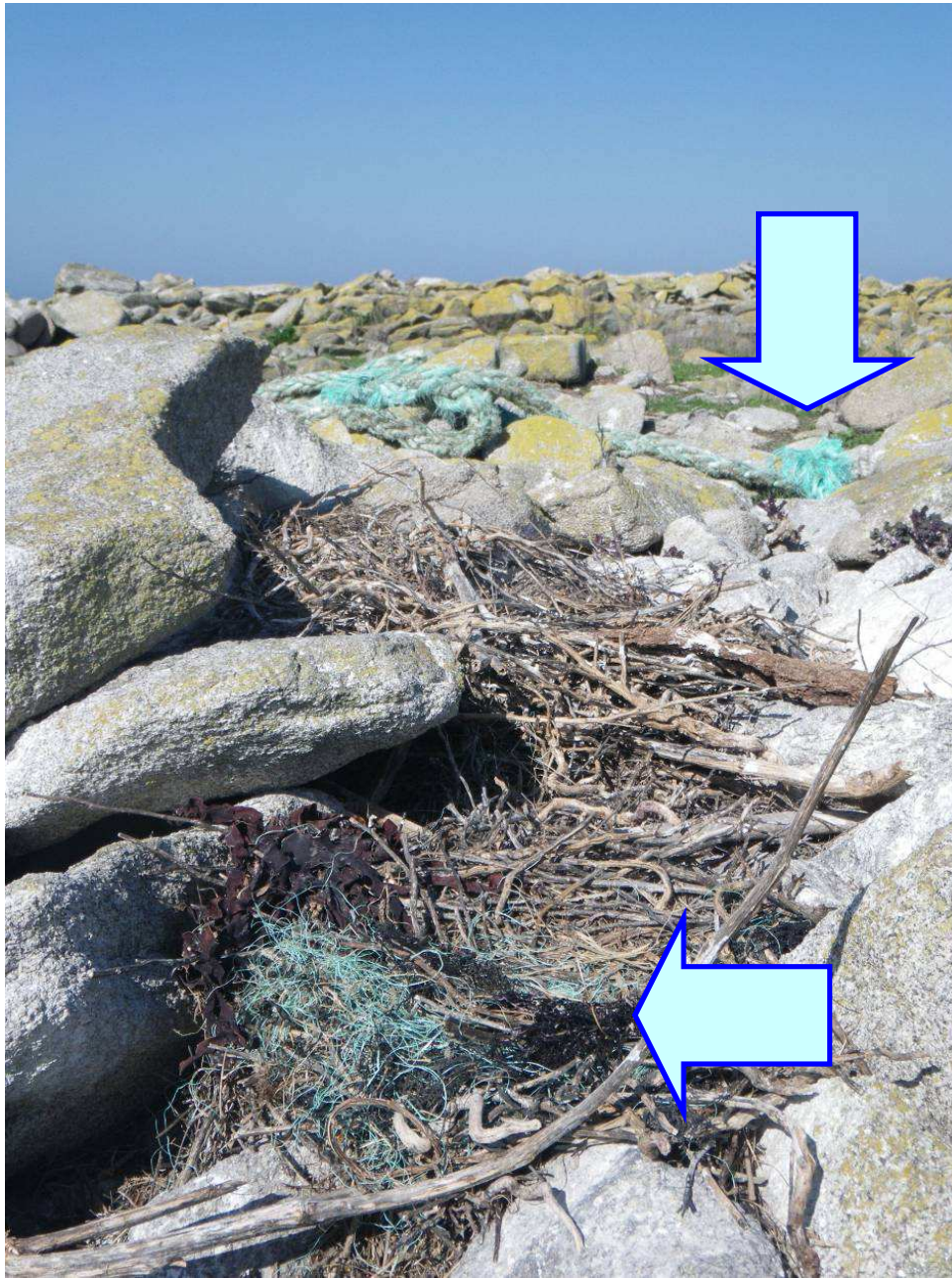
the number of different items of marine debris in the nest was visually evaluated without specific search in the nest cup

Numerous types of marine debris identified, mainly originated from marine activities, especially commercial or recreational fisheries



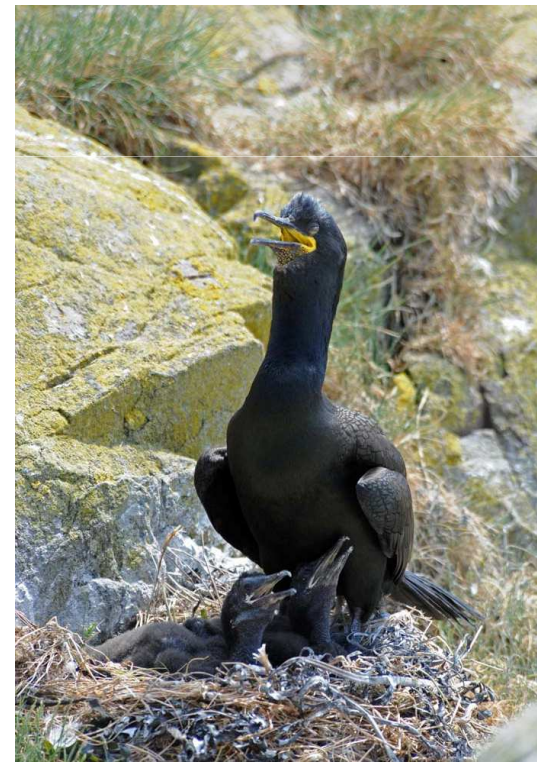
Other types of marine debris collected in shag's nests

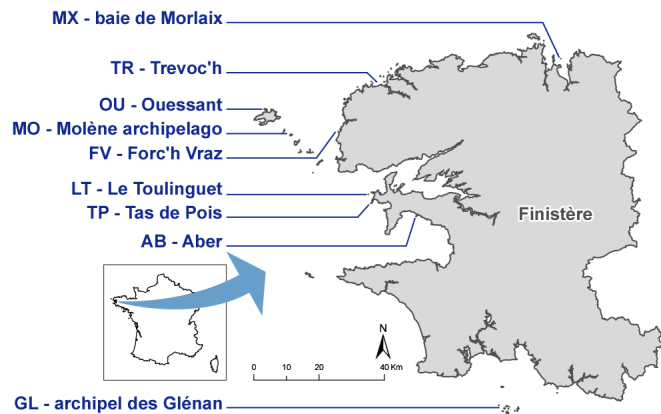




Glenan archipelago 2012:

use of pieces of an hawser
stranded nearby on the islet

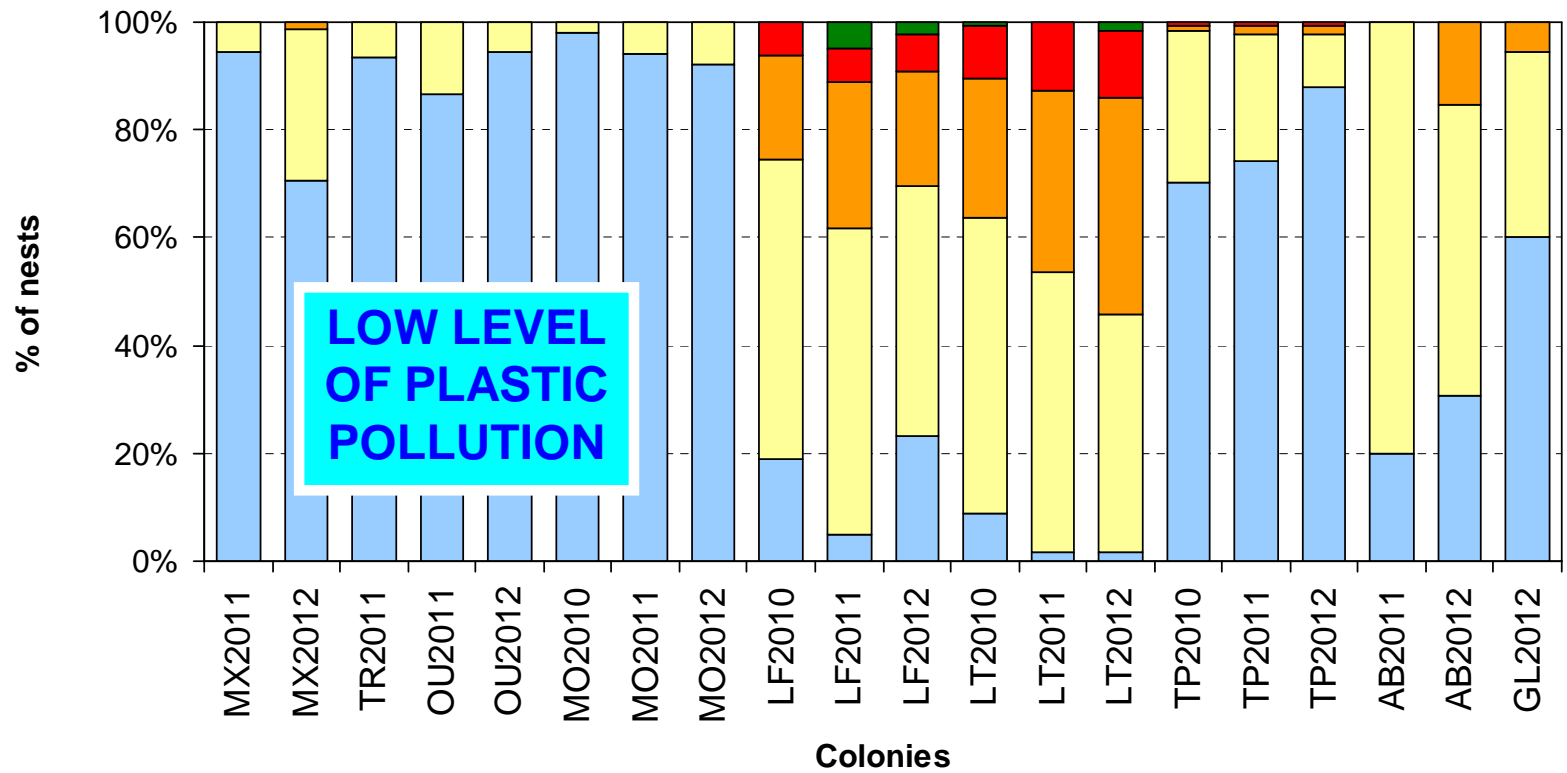




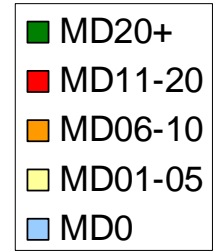
results obtained from 2010 to 2012
on different colonies in Western Brittany



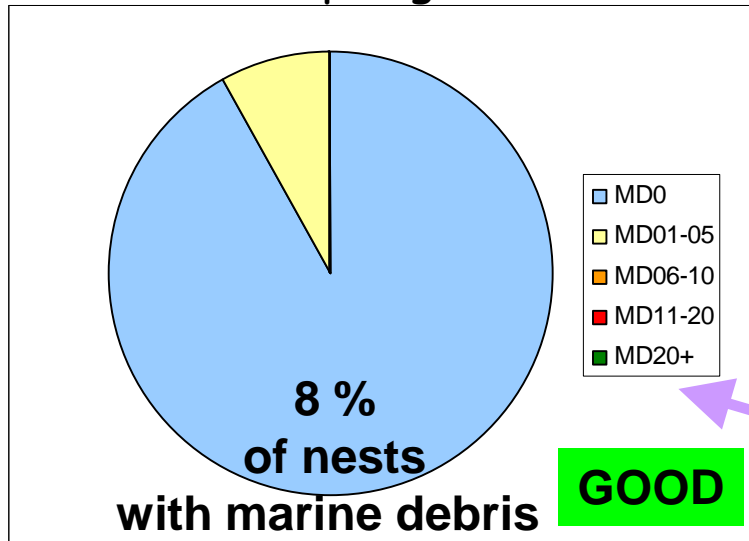
HIGH LEVEL OF PLASTIC POLLUTION



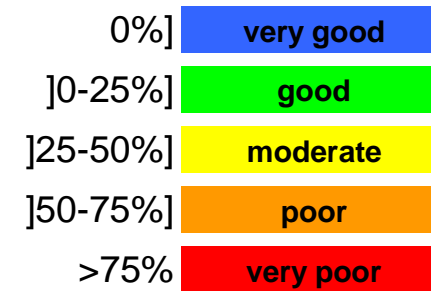
Number of marine debris:



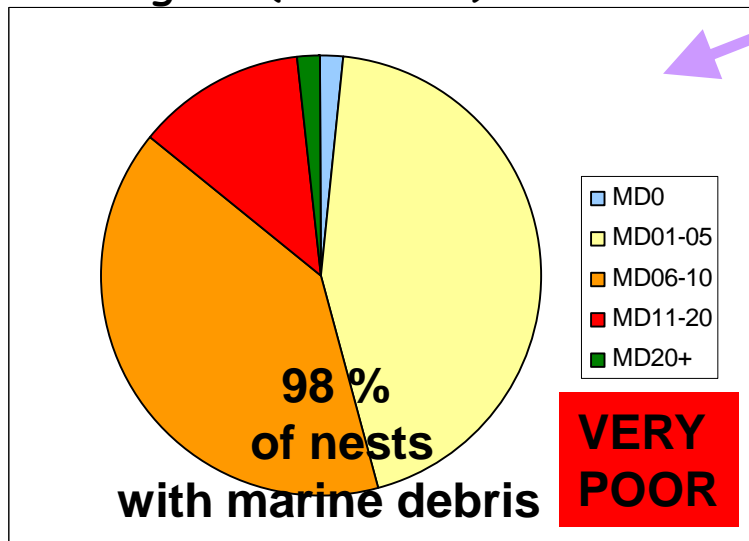
Molène archipelago



% of nest with marine debris



Toulinguet (Camaret)



Indicator of marine pollution in the Iroise Marine Natural Park



further developments:

similar studies on colonies elsewhere in Brittany
as well as in Normandy or in other French regions...

assessment of the usefulness of this indicator of marine pollution
(see descriptor 10 Marine litter - Marine Strategy Framework Directive)...

analyse of marine currents in the study areas,
which could explain the location of higher densities of floating debris
in the vicinity of some breeding colonies...



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location of the colonies sampled in 2010-2012

