



ersatz eggs

HELPING PUT YOU BACK IN CONTROL

Research

In 2006 in conjunction with Gloucestershire City Council, we designed and developed a plastic injection moulded imitation seagull egg. The objective was to see if replacing the eggs in the nest with imitation ones, would work just as effectively if not better than the traditional method of egg oiling. The results were astonishing.

Mr Brentnall who organised the project reported his finding to the Gloucester Gull Action Group and from this, awareness grew throughout other Councils and individuals. Since then, further trials have taken place reinforcing that imitation eggs are an effective, humane and environmentally friendly means of controlling urban seagull populations.

Simon Moon, Environmental Control Officer for Taunton Deane Borough Council reviewed the results of our research, he was extremely impressed. After sharing the findings with the senior management team at TDBC an order was placed for 250 fully assembled eggs in time for the 2007 season.

Simon headed up the project and used the data to complete a comprehensive research paper entitled "The Management of Nuisance Urban Gulls by Deployment of Egg Substitutes" which formed part of his MSc.

The Management of Nuisance Urban Gulls by Deployment of Egg Substitutes by Simon Moon

How do you control increasing numbers of urban gulls effectively, humanly and within budget?

This was the question I asked myself and it would appear from a small scale trial the previous year that imitation eggs were the answer, but would they work in a large scale urban deployment? With no available research on imitation eggs and very little information on urban gulls, I decided to use the opportunity of Taunton Deane Borough Council's gull control programme to study the use of these plastic eggs to establish if they did indeed work and produce an MSc dissertation on the subject.

Throughout the summer 2007, the town centre breeding gull population of Taunton, Somerset, was subjected to an egg replacement programme whereby real eggs were replaced with imitations. The gulls whose eggs had been replaced were monitored every three weeks from May to August and the gulls incubated the imitation eggs for at least twice as long as they normally would and sometimes even longer. Furthermore, once the nest were abandoned, the gulls did not return during the season.

In practice, this meant that the gulls spent the summer months sat on top of buildings and nuisance behaviour normally associated with the breeding season dramatically reduced. Noise levels had decreased and the aggressive attacks that can be experienced when young chicks are present did not materialise within the treated areas.

This control method is humane in the eyes of the public - in that the Council was being proactive and controlling the gulls in treated areas but not in a harmful way, is relatively inexpensive (especially in the current economic climate) compared with falconry, oiling etc. and the eggs can be re-used the following year. Finally, this method actually works as I have proven in my dissertation.



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Urban Gull Research - Increasing our knowledge base by Simon Moon

Urban Gulls and the problems they cause has been widely documented over recent years. Various solutions which claimed to solve the problems have been proposed although opinions are divided as to whether they actually work or not. This is the problem that local authorities, pest control companies and land owners of urban buildings/retail parks which are affected by gull issues are finding - conflicting reports and claims made by experts in this field all add to the confusion when it comes to how to deal with urban gulls.

Whilst it is clear that more research regarding gulls is required, this has to be targeted and focused, rather than generalised. Whilst research about gulls in their natural environment is plentiful, there are very few scientific studies concerning gulls in the urban environment. It's clear that urban gulls are not going to go away and we need to accept that they are here to stay, as such it has clearly become a management issue.

For the last 6 years I have been studying urban gulls and as part of my studies I have been reviewing various methods of gull control. Whilst it is clear that all of these methods have their own merits in certain situations, there is no one overall solution that solves the problem.

The main complaint of noise and aggression appears to be reduced by using a recent method that has become popular with Local Authorities; the plastic imitation egg. Although you cannot quantify noise or aggression levels, I have proven that gulls sit on nests with plastic eggs in them for roughly twice as long as they would with their own eggs. This keeps them sat up on roof tops and not causing as much of a nuisance as if young chicks were around. The plastic imitation eggs have also been shown to reduce numbers of breeding gulls in targeted areas over the long term.

How did I find this out and how did my research in the area of plastic eggs start?

It started with a tough question - how do you control increasing numbers of urban gulls effectively, humanely and within budget?

It would appear from an initial small scale trial that imitation eggs were the answer, but would they work in a large scale urban deployment? With no available research on imitation eggs and very little information on urban gulls, I decided to use the opportunity of Taunton Deane Borough Council's gull control programme to study the use of these plastic eggs to establish if they did indeed work and produce an MSc dissertation on the subject.

Apart from the results obtained from my work on plastic imitation eggs, another benefit has been an appreciation of the practicalities of gull control. It is not just about having an effective technique backed up by scientific research. The technique needs to be effectively implemented and what is obvious is that the approach towards gull control in urban environments needs to be more joined up; co-ordinated working between companies, land owners, relevant parties and local authorities to tackle known factors which influence gull populations such as food sources and available nesting sites. I would call this an urban integrated management plan for gulls.

It is often assumed that gulls are the carrier of a variety of diseases and they are often compared with vermin such as rats. So an important question rarely raised is what diseases do urban gulls carry? And do the types of disease differ between urban gulls and their counterparts breeding in natural environments?

Previous work by other authors in Scotland has shown that 12.9% of sampled gull droppings were positive for Salmonella and an average of 64% of gulls were excreting Campylobacter. It was suspected that the gulls were acquiring these bacteria from sewage works. This is not the case for all gulls, as a study in the Channel Isles did not report Salmonella isolated from gull droppings, so I decided to expand my own research and look into this further in England.



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My work in analysing seagull faeces this summer revealed the presence of bacteria such as Salmonella and Campylobacter, which are normally associated with food poisoning. The results also indicated that antibiotic resistant bacteria were present. Recent research has found that this type of resistant bacteria is the same as the bacteria that cause highly resistant infections in humans - in hospitals and everyday life. The route of infection is often unclear but could gulls be responsible for the spread?

Further studies are ongoing to find out. It is particularly interesting to note that other researchers are active in this area, with preliminary reports from Miami, Florida indicating that antibiotic resistant E. coli is being found associated with gull droppings, all of which adds to the knowledge base pointing towards gulls as pests of public health significance. A final point is that almost all of the research I've come across concerns the carriage of bacteria by gulls in estuaries / coastal areas and there is virtually no research about gulls in an urban environment. So, I think my report on bacterial carriage may well be the first for an urban gull population in the UK.

Simon Moon is an independent research scientist undertaking a PhD on Urban Gulls at De Montfort University, Leicester. He works for the Environmental Health Department at Taunton Deane Borough Council who is supporting his work. This article was originally produced for 'Pest' Magazine November 2011.