ON WATCH FOR WILDLIFE

Wildlife refuge areas are not marked on aeronautical charts, but the chance of a bird strike around them is much heightened.

CAA helicopter flight operations inspector Richard Martin knows first-hand what can happen in a bird strike.

"While operating off a ship some years ago, I'd just lifted off the deck when a sea bird bounced off the front Perspex® screen and into the pitch change mechanism of the main rotor. Most of its feathers spread over the engine particle separator and oil cooling intake screen.

"Fortunately, the ship was still only 200 metres away so my helicopter was back on the deck pretty quickly. Unfortunately that did the bird no good whatsoever."

Richard has been investigating an aviation related concern after a member of a conservation group complained about aircraft flying over the Whangārei wildlife reserve.

Up to 90 percent of Whangārei's harbour and its coastal regions is a Department of Conservation reserve, including areas bordering Whangārei aerodrome.

But this reserve, like all the others, isn't marked on aeronautical charts. So Richard's advice is that, around coastlines, rivers, estuaries and wetlands – and particularly in summer – pilots should stay well above minimum height, and keep an eye out for winged competition.

"Maintaining a 1000 ft height plays to self-preservation because most bird strikes happen between 50 and 800 ft."

In general, turbine-engine aeroplanes are more vulnerable than piston-engine aeroplanes; firstly because of their greater speed and lower noise level ahead of their flight path. Secondly; the intake to the turbine engine faces forward, often without any filter to prevent ingress by objects like birds.

"And beyond self-preservation, an aircraft travelling over sanctuary areas well above where the birds are likely to be, is more neighbourly."

Helicopters fly in the same airspace as birds – often below 500 ft, and should face a high bird strike risk. Birds, however, seem to perceive the presence of helicopters a lot more easily than they do aeroplanes, and most of the time, move out of the helicopter's path.

There's not much to be done about the mass of any bird threatening to collide with an aircraft, but reducing cruise speed in high-risk areas will help, should the worst happen.

If you're flying near or over such an area, turn on all the aircraft lights, including landing lights and strobes, to make the aircraft is as conspicuous as possible.

It's good practice to avoid flying really close to any harbour mouth or dune bank, as they are typical breeding and roosting areas for a number of wading birds.

And for more information, email info@caa.govt.nz for a free copy of the Good Aviation Practice booklet, *Bird Hazards*.

