

Poisonings of cranes and wildlife

5 of a 9 part brochure series



Farmers are increasingly aware of how privileged they are to have cranes on their farms, as cranes are among the world's most graceful yet threatened groups of birds.

Having to depend on the agricultural landscape due to less and less of their habitat remaining, cranes often come into contact with agrochemicals. This often results in poisoning incidents.

Our national bird, the Blue Crane, is a prime example of this, because the use of agrochemicals is considered one of the reasons for the declining population. Fortunately, horrifying news headlines portraying mass crane poisonings are rare now, thanks to a great team effort by farming communities, crane conservationists, agrochemical companies, the Endangered Wildlife Trust's Poison Working Group, sponsors, as well as other interested and concerned people.

Unfortunately crane poisonings still occur and addressing this threat is an ongoing task. *Cover pic*

Cranes and poisoning

Farmers often ask: 'How are the cranes affected when they eat insects or grain treated with an agrochemical?' There is

no one word answer to this and it is never advisable to generalise because different chemicals have different effects on each species, individuals within a species and the environment. It is also often forgotten that chemicals can be absorbed not only by ingestion, but also through the lungs and the skin. Depending on the circumstances, cranes or humans for that matter, could be poisoned just by skin contact when walking through a newly sprayed field or by inhalation after aerial application.

Why do crane poisonings occur?

The main reasons include

- Deliberate misuse of products to kill wildlife for food
- Incorrect agrochemical application methods
- Using products for applications other than what they are registered for
- Ignorance

Other wildlife poisonings

Certain game and waterfowl can be harvested in a sustainable manner using the correct capture method (i.e. cages, shooting), adhering to the nature conservation ordinances and by obtaining the landowner's permission.



2 In the past Blue Cranes have been killed through both deliberate and accidental poisoning
Cover Several Grey Crowned Cranes accidentally poisoned by an organophosphate

Guinea fowl or Egyptian Geese are examples of the most commonly targeted species for food purposes.

However, the use of poison to kill wildlife for food is widely used with severely detrimental effects to both people and wildlife. Most commonly, grain or any other bait is soaked in a pesticide and laid out on the ground in areas where the birds forage or roost. *Pic 4*

This practice is:

- **ILLEGAL** – Guilty parties can face a fine of up to R40 000.00 or 6 years in jail under the Fertilisers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, 1947 (Act 36 of 1947) as well as face charges under the Nature Conservation Ordinances
- **UNSUSTAINABLE** – An entire flock of birds is often killed instantly leaving no breeding adults to rebuild the numbers for future utilisation. *Pic 2*
- **NON-TARGET SPECIFIC** – Ingestion of the poisoned bait or carcasses may result in secondary poisoning. Livestock, people and wildlife can then get killed unnecessarily
- **DETRIMENTAL TO HUMAN HEALTH** – Cooking or removing the crop or stomach before eating the meat of poisoned birds does not get rid of the pesticide. The flesh still contains poison, which is absorbed when eaten. The human body may accumulate certain pesticides that may have long-term detrimental effects on people

The consequences of eating poisoned meat

(These vary according to the type of agrochemical used.)

With acute poisoning there is an immediate onset of symptoms, often followed by death if left untreated.

Symptoms such of poisoning include:

- Nausea, vomiting, frothing, salivation
- Muscular weakness, paralysis and tremors or convulsions
- Blurred vision, widening and narrowing of pupils
- Loss of respiratory function, coma, heart failure

With chronic poisoning the effect is delayed. When poisoned meat is eaten regularly over extended periods of time, the poison accumulates in the body especially in the liver, kidneys, spleen, eyes, lungs and nervous systems. This results in long-term ill health and diseases such as organ failure, Parkinson's disease, respiratory problems, infertility, cataracts, cancer and death.

NB: Seek medical or veterinary assistance immediately if poisoning is suspected.

Know your agrochemicals

Agrochemicals are an essential part of most agricultural practices and with a little effort and knowledge, they can be applied with minimal detriment to the whole environment including the cranes. In preventing wildlife poisonings, it is vital that every person ever using agrochemicals has a basic understanding of such products. When looking at the broad



3 There is a wide variety of pesticides available – know the application of each and store correctly

spectrum of agrochemicals, it is most often the pesticides rather than the herbicide or fungicide groups that result in avian poisonings. Within the pesticide class, organophosphates primarily, then carbomates, are responsible for most crane mortalities. Modern compounds, such as the pyrethroid group, tend to be more target specific which means they are specifically made to control a particular pest in a certain situation. Thus when used correctly, these products pose a minimal threat to the cranes.

Other products that are a major threat to cranes are those containing diazinon as an active ingredient. Diazinon (trade name is Dazzle) is found in certain animal dips, is detrimental to wildlife and not environmentally compatible. Most often, if diazinon is indicated as the cause of wildlife poisoning, it is not accidental but intentional as the chances of cranes accidentally coming into contact with a dip is minimal. Culprits scatter diazinon soaked grain to attract birds and other wildlife. The dead animals are later collected and either consumed by the culprit or the meat is sold to unsuspecting customers.

The only other way cranes will come into contact with diazinon is if they eat maggots in wool clippings that have been treated with diazinon.

Cranes are also susceptible to poisoning from lead shot and urea but not much is known about the extent of these incidents in South Africa.

More about agrochemicals

- Agrochemicals are target specific, which means they are specifically made to kill a particular pest in a specific situation. *Pic 3*
- It is illegal to use agrochemicals for a purpose other than that stated on the label
- An agrochemical must be registered with the government and can be identified by the L or G number e.g. G723 that must be indicated on the container
- Nowadays the chemical class to which the active ingredient belongs is often indicated on the label and potential threats of the product to wildlife are also noted
- Each agrochemical reacts differently to the environment

Once one understands the basic principles of safe and responsible handling of these products, the chances of wildlife poisonings will be minimal



4 Mealie kernels are soaked in poison and scattered near crane roosting sites

What you can do

- Read the label on all agrochemicals before use
- Do not eat poisoned meat or buy meat from unknown sources
- Ensure that all agrochemicals are stored under lock and key so as to prevent the illegal use of the chemicals
- Protect yourself when using these products. It is your responsibility to do so
- Protect our wildlife and community from poisonings by practising the above safe and responsible use of agrochemicals

To minimise crane mortalities due to poisonings, people have to gain a respect for agrochemicals and their own health. Once one understands the basic principles of safe and responsible handling of these products, the chances of wildlife poisonings will be minimal.

Contacts

- For information on wildlife/crane poisoning, the effects of agrochemicals on the environment, advice on problem animal and pest control, contact the Wildlife Conflict Prevention Group on (011) 486 1102 (office hours) or the Nashua Mobile Pesticides Help line on 082 802 6223
- For information on the safe and responsible use of agrochemicals and procedures or training, contact the Wildlife Conflict Prevention Group on (011) 486 1102
- For information on human poisonings, contact Tygerberg Poison Info Centre – National 24 hour emergency help line (021) 931 6129; Unitas Hospital – National 24 hour emergency help line on 0800 111 9900

This brochure series has been developed for farmers and the public to use in conserving the three cranes species and their habitats. For more information about EWT and cranes, call (011) 486 1102 or email crane@ewt.org.za

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