

Treatment of infectious diseases in stranded harbour seals

By A. Moesker M.D., Int. Care Spec.

Harbour Seals Rehabilitation and Research Centre, Pieterburen, The Netherlands

Introduction

The Harbour Seals Rehabilitation and Research Centre in Pieterburen started its activities of receiving and treating stranded seals 16 years ago. While in the early days mainly newly-born motherless seals were received, care was gradually extended to include an increasing number of older sick animals. The seals vary in age from 3 months to 1 year. Pollution of the sea, particularly by PCBs (polychlorinated biphenyls), is not only lowering the birth rate of seals but impairs their resistance to infection in the first year of life.

Over 90% of these infections occur in the lungs; they are always combinations of parasitic and bacterial infections.

Figure 1 shows the number of seals taken into the centre in the 1980s. A total of about one hundred stranded seals are now taken in every year. About one third of this number are baby seals, the others are young seals nearly always with lung infections (Fig. 2).

First aid

When a young seal is caught, disease has always been raging for some time. This means that the infectious

process has already reached an advanced stage. Therefore the seals are badly emaciated and especially dehydrated without exception. Despite their very weak physical condition, the stress caused by confronting humans is often violent.

To prevent such shock, when a stranded seal is found it is first given steroid medication in the form of 1 mg of Decadron* per kg bodyweight. Dehydration is countered with orally administered rehydration salts. This liquid (Fig. 3) is administered 3 times at hourly intervals. In this way the circulation is stabilized. Stabilization is absolutely necessary, since the condition of shock due to a serious infection combined with the stress induced by being caught can easily lead to the lethal condition of respiratory distress. Then the sick animal often dies with symptoms of massive pulmonary oedema.

In normal conditions seals breathe through the nose. In a catarrhal bronchitis the nasal passages are quickly blocked by mucus, making breathing very difficult. We found that this problem could be obviated with the drug Mucosil*. This drug can be sprayed into the nasal passages in liquid form. Mucosil is an acetyl cysteine preparation which breaks down the sulphur bridges in mucus. The viscous mucus becomes liquid and the nasal passages

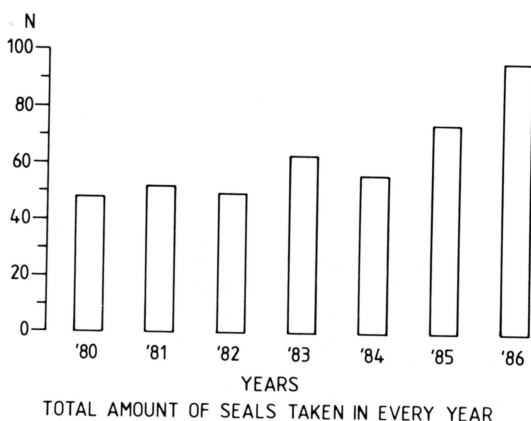


Figure 1.

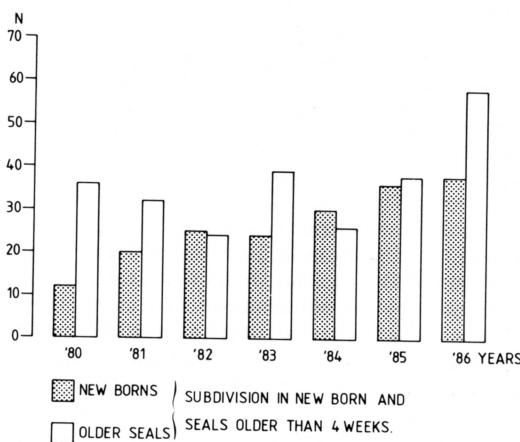


Figure 2.

