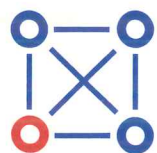


**Our aim:
"Sound and
competitive
production of
healthy animals"**



**THE SWEDISH
ANIMAL HEALTH SERVICE**

The Swedish Animal Health Service

The Swedish Animal Health Service is a veterinary organisation providing animal health service to all breeders of pigs, beef cattle and sheep in Sweden. The objective is to further a sound production of healthy animals on an economically competitive basis.

Our name "Swedish Animal Health Service" demonstrates that we are intent on safeguarding the interests of Swedish animal breeders in an international perspective. Our objective is all the more important when efficiency and competitiveness is increasingly demanded.



All animals that change owners must be healthy. Guarantees should be provided that they will not spread infections. Such demands from the farmers and veterinarians originally led to the start of an organised animal health control already during the 1940's. The base of our work is still health control of weaner pigs and livestock. The Swedish Animal Health Service guarantees that animal trade deals only with healthy animals. The increased and more uncontrolled international trade of animals emphasizes the importance of this control.

Through the years the organisation has developed and grown which reflects the continuous change of the panorama of diseases to be controlled and prevented. Today health control and health service is provided at all stages of the production chain. In addition we today also run control programs aiming at national control or eradication of e.g. Aujeszky's disease in pigs, Maedi Visna in sheep and bovine tuberculosis in farmed deers. These programs constitute a substantial part of our work. Research and development are also becoming increasingly important.

Ahead lies a great challenge. In order to become successful we must work together - animal owners, the Swedish Animal Health Service and others who work professionally with animals and animal health - towards our aim - the sound and competitive production of healthy animals.

A handwritten signature in dark ink, appearing to read 'Martin Wierup'.

Martin Wierup
Professor
Head of Swedish Animal Health Service

**The Swedish Animal
Health Service is
an organisation
providing animal
health care service for
all breeders of pigs,
beef cattle and sheep.**

CONTENTS

The importance of healthy animals - the reason for the existence of the Swedish Animal Health Service	3
Development to meet growing demands	4
What is the health service?	5
Health control - how it works	6
Programmes for disease control and other tasks	7
Spreading of knowledge - gaining new knowledge	8
This is how we work for animal owners	9
Much to gain at a reasonable price	10
Regional organisation - the scope of our work	10
The future	11

The importance of healthy animals - the reason for the existence of the Swedish Animal Health Service

Healthy animals are profitable animals

Efficient production of animals requires that disease, mortality, reproductive disorders, veterinary and medication costs, are all kept to a minimum. Profit can be severely undermined by poor animal health. One of the best means of increasing profit in Swedish animal production is by resolutely applying measures to improve animal health. Hundreds of millions of SEK can be gained by this. The efficiency of Swedish animal production must be raised if the country is to compete successfully with European prices. Much can be achieved along these lines through animal health work. Healthy animals are profitable animals.

Healthy animals are profitable animals.

Healthy animals inspire confidence.

Healthy animals are signs of ethical production.

Healthy animals inspire confidence

Unsound production and sick animals cause loss of confidence on the part of the consumer. By producing healthy animals in a sound environment, and by using animal medication correctly and restrictively, confidence in Swedish products can be strengthened. Consumers must be able to rely on Swedish meat. Inspiring the confidence of consumers is economically profitable - this applies in Sweden as well as in the rest of Europe. Healthy animals inspire confidence.

Healthy animals are signs of ethical production

Sound production is the same as good animal husbandry. We must not give way to the more cynical attitude of other countries with regard to animal welfare. Animal production must tolerate public insight. Keeping animals healthy is good ethics.

Healthy animals are profitable animals. The work of the Swedish Animal Health Service aim at improving animal health and increasing the competitiveness of agriculture.



Development to meet growing demands

Modern animal health service - a result of the demands of farmers and the general public

During the 1930s, Atrophic Rhinitis and Enzootic pneumonia were becoming an increasing problem in pig herds. Awareness grew that it was not sufficient to treat infected animals. Interest was focused on the health of weaner pigs and livestock for trade. At an early stage it became evident that they were spreading infections and disease.

During the 1940s farmers and veterinarians took the initiative of demanding systematic measures for disease control. Health supervision of livestock became an absolute necessity.

During the 1950s, cooperative slaughter-houses as well as privately owned slaughter-houses decided to trade only in health-controlled pigs. Systematic health supervision was organised.

After an extensive investigation, the task of providing health supervision for weaner producing herds, was given to the Meat Marketing Association in 1970. Thus, what has now developed into the Swedish Animal Health Service, had been created. It was emphasised that the Animal Health Service was to be impartial and that its work was to be based on knowledge.

Health control of dairy cows became the responsibility of the Association for Swedish Livestock Breeding and Production (SHS).

Regulations necessary for health control

National or regional borders do not prevent the spreading of infective agents and diseases. Firm regulations and measures undertaken on a national level are necessary for disease prevention. For this reason, regulations have been issued by the government. In 1980 an Act on Animal Health Control was passed, which served to elevate the status of the Animal Health Service.

Livestock first, then slaughter animals

Originally the call for systematic animal health control was due to farmers' demands for health-controlled livestock. Later on, consumers demanded guarantees regarding the health status of slaughter animals. During the

1980s the Swedish Animal Health Service was given the task of supervising and improving the production of fattening pigs and beef. These forms of health control benefit both animal producers and consumers.

At present, programmes for health control are available for weaner pigs, fattening pigs, calves and sheep. The original programmes have developed into programmes for systematic health care.

New tasks

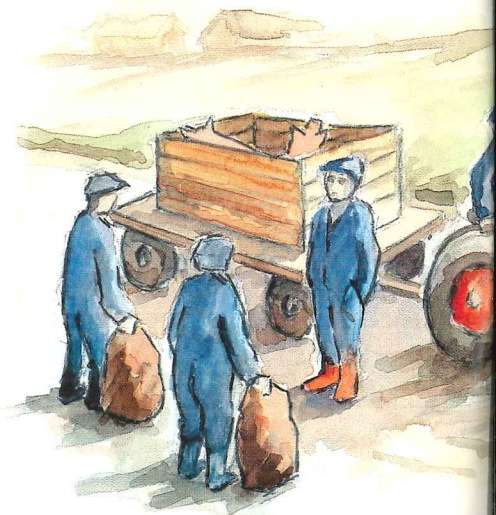
Apart from health control and health service, the Animal Health Service has been given the responsibility for leading national eradication programmes for Aujeszky's Disease (AD) in pigs and Maedi-Visna in sheep. Furthermore, the Animal Health Service is responsible for post mortem inspections as a means of national disease surveillance. We have a particular responsibility for animal health at breeding stations. The Health Service also serves an important purpose in testing new medication for farm animals.

Sweden an example for other countries

Swedish farmers have in many ways been pioneers. Several other European countries have followed in the footsteps of the Swedish Animal Health Service. Large pig-producing countries such as Denmark and Holland have organised impartial systems for animal health supervision, similar to the Swedish system. The same applies to Germany, Norway and Finland.

1930-40	Increasing problems with atrophic rhinitis and enzootic pneumonia.
1940-50	Farmers and veterinarians demand systematic health control of livestock.
1950-60	Decisions are taken by the livestock trading branch to deal only in health-controlled weaner pigs.
1960-70	Organised health control expands to include a large part of the country's production of weaner pigs.
1970-80	The Pig Health Service of the Meat Marketing Association develops.
1980-93	New tasks are developed - health control of fattening pigs, beef cattle and sheep, AD, Maedi Visna, post mortem inspections and animal welfare supervision.
1993	Strengthening of the national profile. Change of name to The Swedish Animal Health Service.

*Buying a pig in a poke.
Farmers trading pigs at a
cross-road in former days.
Increased trading increased
the necessity of health
control.*



What is health service?

The concern of both farmers and the country

Good animal health is of great importance for the economy of the farmer. It is also of national interest. Health control means that the animal health status in herds is systematically monitored by veterinarians, the main objective being to prevent the spread of infection. In fattening herds it also serves as a guarantee for the consumer.

The Act on Control of Animals gives guidelines for the animal health control programmes of the Swedish Animal Health Service. The main purpose of the Act is:

- To further animal production.
- To improve the genetic quality of breeding stock.
- To prevent animal diseases.

Health control means the systematic monitoring of infectious diseases throughout the production chain: from breeding herds to production herds all over the country.

At the request of the government

The Swedish government has given the Swedish Animal Health Service the task of controlling the health of pigs, sheep and cattle.

Impartial - in the name of the law

The Swedish Animal Health Service is available to all producers in the country. To guarantee the impartiality and sincerity of the Swedish Animal Health Service, the organisation is under public control.

Health declaration

Animals from monitored and healthy herds of good hygienic standard are termed "health declared".

If an infection occurs that could influence the health status and profit of other herds, the health declaration is withdrawn as well as the farmer's permit to sell animals.

Guarantee and insurance for livestock trading

Buyers of livestock must be given guarantees of quality. The Swedish Animal Health Service can provide such guarantees. Herds affiliated to the Animal Health Service are insured for costs arising from anything that may go wrong despite health supervision.

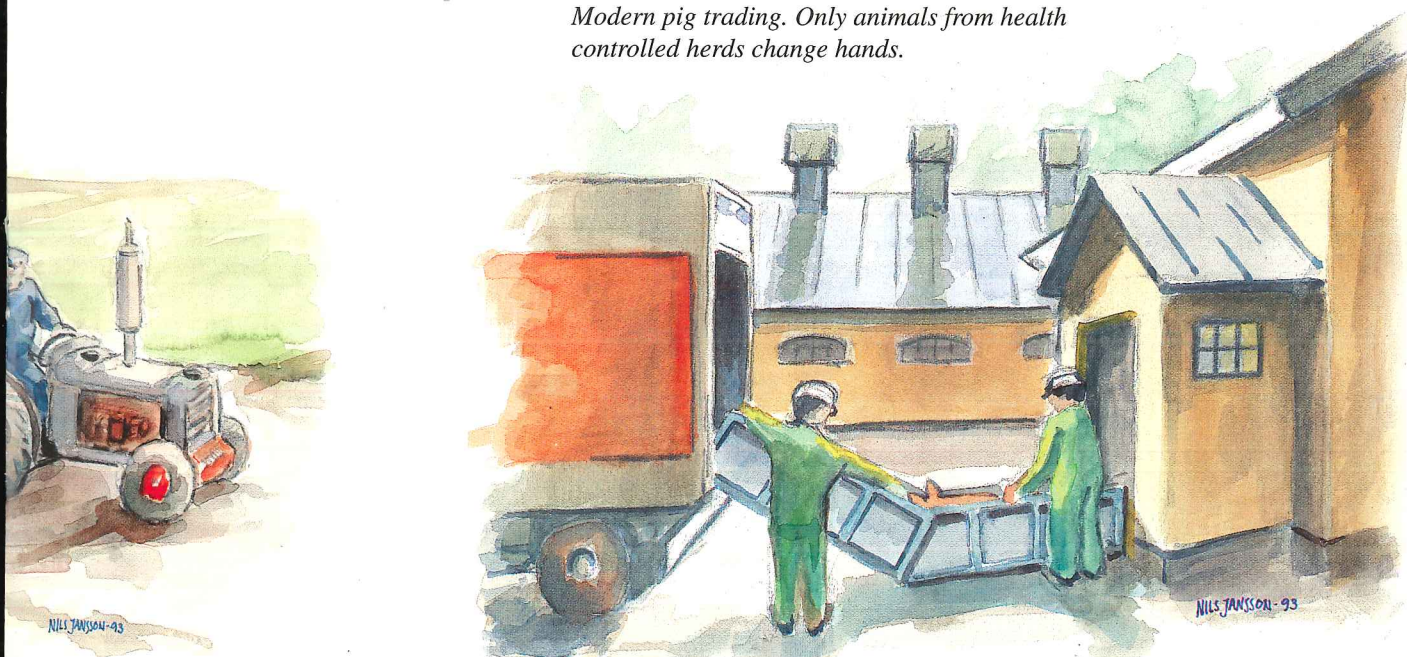
Activity reports

The results of health supervision programmes are reported annually to the Swedish Board of Agriculture. This is necessary as documentation of Sweden's animal health status in relation to that of other countries.

**Health control means
veterinary monitoring of
health status in herds.**

**The main objective of
health control is to
prevent the spreading of
infection.**

Modern pig trading. Only animals from health controlled herds change hands.



Health service - how it works

Health care - the next step

The farmer needs assistance when health control programmes show that his animals are unhealthy. Sick animals have to be cured and new outbreaks have to be prevented. Weaning, feeding plans, age and weight - all must be standardised in the animals to be sold. Health control developed into systematic health service.

Health service detects, acts and forestalls health disorders

In the early days of animal health work, Animal Health Veterinarians were responsible for treating sick animals and for prophylactic measures. Today, sick animals are mainly treated by the herd's ordinary veterinary practitioner, whereas the whole scope of prophylactic measures are the responsibility, and speciality, of the Animal Health Veterinarian.

Health service is to

- detect
- take measures
- forestall health disorders.

Many animal diseases, the symptoms of which can not be detected by the uninitiated, cause losses for farmers. Detecting and analyzing such diseases is a challenge to the Animal Health Service and is an essential part of animal disease control.

Healthier animals - increased profit

Result analysis and disease statistics from slaughter-houses are used as indicators of health problems. The cost of disease incidence can be calculated.

Once the problem is understood measures are suggested. Improving management, grouping of animals, correcting flow charts, more efficient ventilation, purer water, improved feed, mineral supplements, vaccination - are all examples of measures that may be included in suggested programmes.

Extended programmes for health service of calves play an important part in improving profitability in beef production. Counselling farmers and visiting farms are the basis of all animal health work.



Programmes for disease control and other tasks

The eradication AD-programme - a major challenge

An outbreak of Aujeszky's Disease (AD) leads to serious illness in pigs and to the death of piglets. Other species are also susceptible to AD. The disease causes heavy losses to farmers. The disease is so severe that it must be eradicated. The Swedish Animal Health Service is responsible for operating an eradication programme at the request of Swedish farmers and the government. The eradication programme is largely financed by the government.

All sow herds in the country are to be tested by blood samples before 1995. Thousands of infected animals are detected and slaughtered. The eradication programme has developed well and is close to the goal. The main objective is to declare Swedish population AD-free in 1995. In time, all animals in livestock trading will be AD-free. In this way fattening herds will also become AD-free.

The AD-programme includes regulations for preventing the infection from spreading. According to the regulations, specific procedures must be followed when introducing new animals to a herd and when transferring animals from one herd to another. Bought animals must be tested before being brought into the herd.

Experience gained through the AD-programme will be of use when animal trading is internationalised and other animal diseases need to be controlled.

Maedi-Visna - an important disease to control

Maedi-Visna is caused by a virus. The virus infects sheep gradually, slowly causing the animal's health to deteriorate. After a long period, clinical symptoms, mainly in the lungs and brain, appear. The disease is incurable and invariably fatal.

The first reported case of Maedi-Visna in Sweden was in 1974. The infection has subsequently spread to many herds. An official but voluntary control programme was initiated in 1993 and is the responsibility of the Swedish Animal Health Service. A government grant reduces the farmers' expenses.

Post mortem examinations - important for disease control

It is important to establish the cause of disease and death of animals. Post mortem examinations are an important diagnostic method - not only for common diseases, but also for serious diseases such as Swine Fever and Foot and Mouth Disease.

The Swedish Animal Health Service is responsible on a national level for supervising the use of post mortem examinations as a diagnostic measure. This responsibility covers all species of animals.

Post mortem examinations provide essential information necessary in documenting the country's animal health status in relation to that of other countries. The government provides funding.

Animal welfare

By preventing animal disease the Swedish Animal Health Service protects the welfare of animals. We also advocate sound methods of production. We offer municipal authorities help in supervising animal welfare in accordance with government orders. Our supervision is cheaper for the farmer and more efficient for society.

Investigations

The Swedish Animal Health Service is often commissioned to undertake special investigations for the Swedish Board of Agriculture. Insurance companies turn to us for expert opinions on various matters, etc.

Eradication of tuberculosis in deer

Bovine tuberculosis, caused by *Mycobacterium bovis*, was eradicated from Swedish cattle through a grant eradication programme that started in 1934. At that time, 30 % of the cattle were Tb-infected. Sweden was officially declared free of bovine tuberculosis in cattle in 1958. In 1991 the disease was discovered in a herd of farmed fallow deer and over the next three years ten other infected herds have been identified. In 1994 The Swedish Animal Health Service was assigned responsibility for an eradication programme of tuberculosis in deer.

Sheep health service is provided by the Swedish Animal Health Service. Controlling Maedi-Visna is of special importance.



- Other assignments**
- **Eradication of AD in pigs**
 - **Control of Maedi-Visna in sheep**
 - **Eradication of tuberculosis in deer**
 - **Responsibility for post-mortem examinations**
 - **Supervision of animal welfare**
 - **Investigations**

Spreading of knowledge - gaining new knowledge

Scientific knowledge a prerequisite for progress

The animal owner must know how to look after his animals. Due to steadily growing demands for increased productivity, farmers must also be knowledgeable about prevention of animal disease and about how to deal with diseases when they occur. Supplying information is an important task for the Swedish Animal Health Service.

Following national and international research

New knowledge about animal health care is constantly being gained at Swedish and international research centres and by those working with health care. The Swedish Animal Health Service follows this research and conveys relevant scientific findings, and knowledge from experience, to Swedish farmers.

Experience is documented

Apart from research findings, new knowledge is also constantly being gained through the work of Animal Health Veterinarians. Such information is compiled and made available to farmers.

Initiating research

Through close contact with breeders, practising veterinarians and counsellors, we receive signals about fields in which research is necessary. We then initiate and take part in projects for research and development. These projects are often run in cooperation with the National Veterinary Institute (SVA) and the Swedish

University of Agricultural Sciences (SLU). Close cooperation with these and other national, and also international, research centres is necessary and reduces the costs. Cooperation leads to advances in development. Without new knowledge development stagnates.

Testing new methods

Sow pools. Suckling sows in groups. Calves in loose range on deep straw bedding. Outdoor production of fattening swine. New types of boxes. - Development is rapid. There is a great desire among farmers to experiment.

Success is encouraging. However, not all new methods are necessarily better. The Swedish Animal Health Service studies and takes part in the development of new methods. Experience already gained by the Animal Health Service is often very useful right from the start. A thorough follow-up of results, not least the effect on animal health, is important.

Pharmaceutical companies often use us to test new medication and vaccines before introducing them on the market.

The spreading of knowledge

The wide range of knowledge gained in the aforesaid manner by Animal Health Veterinarians must be put to use. Knowledge is spread in many different ways to other veterinarians and counsellors and even directly to animal owners. Animal owners must know how to look after their animals.

**Animal owners have to
learn how to improve
animal health.**

**Without new
knowledge
development will
stagnate.**



Research leads to new knowledge that lays the foundation for new successes in the work of improving animal health.

This is how we work for animal owners

Counselling and visiting farms

Animal health work is based on qualified veterinarians visiting farms and giving advice. As a rule, these visits are carried out by the Swedish Animal Health Service's own veterinarian or by the herd's practitioner, at the request of the Animal Health Service. These occasions provide an excellent opportunity to give information to the farmer and for discussions. A telephone call may also solve many problems. By attending courses, in which the Animal Health Service participates, farmers receive valuable advice.

Efficiency through cooperation

The Swedish Animal Health Service cooperates with other parties within the animal health world. Through this we can offer both broad and deep competence.

It is our wish that herd practitioners should cooperate with the Animal Health Service, so that the farmer can benefit from our common knowledge and experience. We also cooperate with other advisors who are well acquainted with the conditions in the herd and the economy of the production. Similarly we cooperate with environmental technicians, construction experts, feed experts and economists.

Our cooperation with veterinary inspectors employed by the National Food Administration and stationed at the country's slaughter houses, is of particular importance. Findings at slaughter are registered and provide an excellent basis for evaluating the results of health control measures and for tracking herds with health problems.

Our work methods:

- visiting herds
- investigations
- counselling

The importance of the farmer's initiative

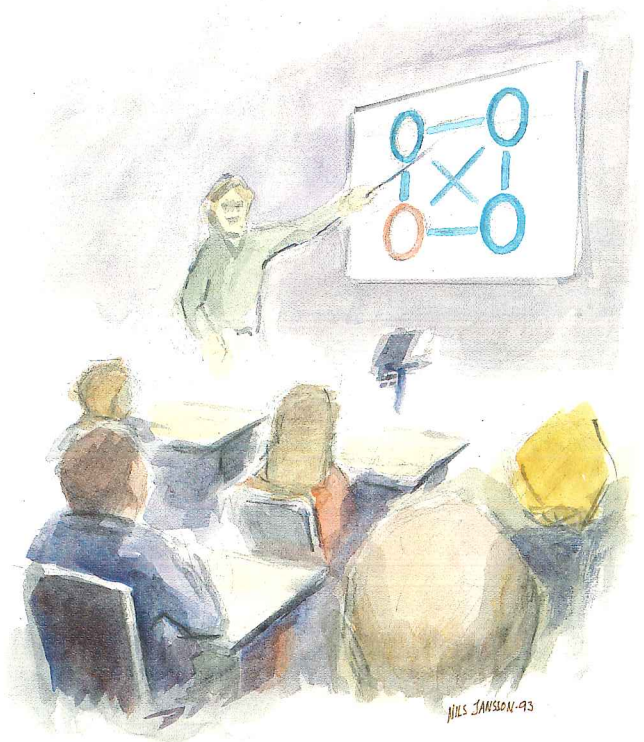
The animal owner is responsible for animal health in his herd. It is up to him to contact the Animal Health Service when health problems arise. Once this has been done it is the task of the Health Service to act quickly and efficiently to provide help.

Knowledge, efficiency and judgement

In the Swedish Animal Health Service we are prepared for demanding and challenging tasks.

We want our work to be characterised by knowledge, efficiency and judgement.

Knowledge has to be spread to be of use. The Swedish Animal Health Service's cooperation with advisors, environmental technicians, construction experts and economists gives farmers access to a wide range of knowledge.



Much to gain at a reasonable price

Herd fees

The cost of affiliation to the Swedish Animal Health Service is based on the size of the herd. The fee for a sow herd roughly corresponds to the cost for parasite control in the same herd.

Government grants

As animal health is profitable, and important also for the general public, government grants are issued. These grants guarantee impartiality and the documentation of the country's animal health status.

Government grants are also issued for eradication programmes (AD and Maedi-Visna) and for post mortem examinations.

Annual costs

The total annual cost for the running of the Swedish Animal Health Service is approximately 25 million SEK. A third of this is covered by government grants.

The cost for the first year of the AD-programme is 30 million SEK. The corresponding cost for Maedi-Visna and for post mortem examinations are 1,5 million and 3 million, respectively.

Small staff - efficient organisation

The Swedish Animal Health Service is run by a small staff. A total of 40 persons, of whom 35 are veterinarians, work directly for the organisation. It is our strategy to keep the organisation small. When necessary, external services are purchased. Annually, 185 veterinary practitioners are commissioned for special tasks in individual herds. We are a small organisation

with resources for broad and deep knowledge. This is the model of the Swedish Animal Health Service.

Our model:

- small staff
- efficient organisation
- cooperation

The scope of our activities

A total of approximately 10 000 herds are affiliated to the Swedish Animal Health Service. Health care programmes for weaner producers cover 8 000 herds. Health care programmes for producers of fattening pigs cover 1 650 herds. 90 percent of all producers of weaner pigs and fattening pigs are affiliated.

70 percent of the country's large specialised beef producing herds are affiliated to calf health programmes. These herds (a total of 175) base production on purchased calves. Sheep health care programmes cover a total of 50 000 ewes in 1200 herds.

With the exception of sheep herds, each herd within the different programmes receives at least one veterinary visit per year. During 1992, 10 600 such visits were carried out. 43 percent of these visits were carried out by the herd's ordinary practitioner. Additionally 1 900 visits were undertaken within the AD-programme. 26 percent of these visits were carried out by herd practitioners.

Regional Organisation

Three large regions, North, Middle and South make up the geographical regions of the Animal Health Service. Regional offices are placed in Kävlinge (South), Skara (Middle) and Umeå (North).

Veterinarians employed by the Animal Health Service are, as a rule, stationed at meat marketing societies.

The central management is in Stockholm at the offices of the Swedish Meat Marketing Association.



The future

New challenges in store

The demands of the future, for increased efficiency in animal production, must be met. For this reason we must work forcefully to continue the improvement of animal health.

Government grants are concentrated on controlling and eradicating epizootic diseases. Farmers must increasingly rely on their own resources for control of the expensive production diseases. The need for efficient animal health service is accentuated.

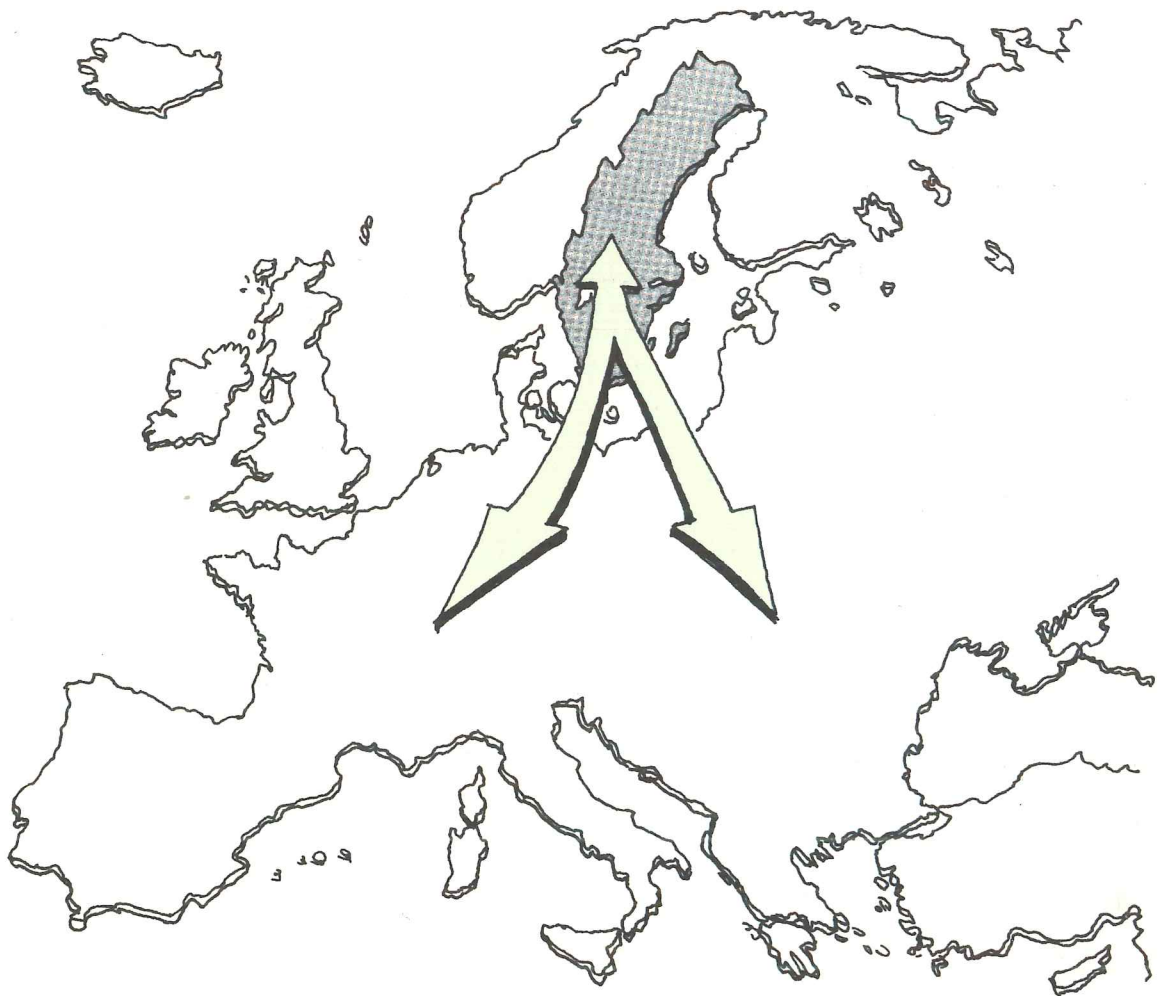
The Swedish Animal Health Service needs to develop and strengthen its role as a veterinary organisation of national importance. In the future, the number of health control programmes may increase and include additional species.

The EU opens borders and increases the risk of infection spreading. This necessitates more vigilant disease surveillance.

New systems for health supervision and disease control will need to be enforced. It is possible to ensure quality throughout the whole production chain.

National Actions Necessary

The future will demand a concentration of energy, and cooperation between all who work with animals and animal diseases. To cope with the challenges of the future we must act as a nation.



Sweden in Europe. The EU opens borders and increases the risk of infection spreading. Actions on a national level are necessary to cope with the challenges of the future.

***This is the Swedish
Animal Health Service***

***The Swedish Animal Health Service is an
organisation providing animal health service
for all producers of pigs, beef cattle and
sheep in Sweden.***

***The work of the Swedish
Animal Health Service***

Health control and health service for;

- weaner pigs
- fattening pigs
- beef cattle
- sheep

Eradication programmes and other tasks

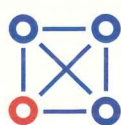
- Eradication of AD
- Eradication of bovine tuberculosis
- Control of Maedi-Visna
- Responsibility for post mortem examinations
- Participation in animal welfare surveillance

Information and education

- Compiling and spreading knowledge
- Initiating research and development

This is our aim

***Sound and competitive production
of healthy animals***



THE SWEDISH ANIMAL HEALTH SERVICE

Swedish Animal Health Service
Swedish Animal Health Service, 121 86 JOHANNESHÖV
Tel. Int + 46 - 8 - 725 80 00, Fax. Int + 46 - 8 - 725 81 72

What is the meaning of our logotype?

The primary task of the Swedish Animal Health Service is to prevent the spreading of infection. Our logotype symbolises how an infection can be spread from one herd to many others.