OSTRICH PROTOCOL – Edition: 01

According to Section 9 of the Animal Diseases Act (Act 35 of 1984), the Minister of Agriculture prescribed control measures relating to ostriches as published in the Government Gazette No. R.29155 Government Notice No. R.864 of 1 September 2006 as amendments to regulation 20 and insertion of regulation 20B.

The following guidelines do not substitute but are to be read in conjunction with the above-mentioned government notice. The current edition of the ostrich protocol with the requirements for the registration of farms, testing for avian influenza and movement control measures will remain in place until the end of the current outbreak as declared by the director. Thereafter it is envisaged to relax the testing and movement control measures for ostriches. Until further notice, the following control measures are in place:

1. The application of the gazetted control measures in regulations 20 and 20B, and this protocol is limited to ostriches that fall into the definition of ‘poultry’ according to the Terrestrial Animal Health Code of the World Organization for Animal Health (OIE). This includes all ostriches that are reared or kept in captivity for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds.

1.1 Free-ranging wild ostriches that are kept in officially recognized nature conservation areas are thus excluded from the provision of the gazetted control measures in regulations 20 and 20B, and this protocol, but all domestic or wild ostriches kept for breeding or the production of meat or eggs are included.

1.2 Ostrich breeder birds used for the production of eggs and incubating facilities used for the production of hatching ostriches are excluded only from the requirements for routine serological testing and have to comply fully with all requirements for registered compartments.

2. According to regulation 20B, all farms and facilities housing ostriches that fall into the definition of poultry have to be officially registered by the Director: Animal Health, National Department of Agriculture as approved compartments for the purpose of keeping ostriches according to the requirements listed below under 7.

3. According to regulation 20(1)(a)(v), no ostriches may be moved from any registered compartment to another registered compartment or to an abattoir for slaughter purposes, except under the authority of a state veterinary movement permit OR accompanied by a state veterinary declaration in accordance with the exemptions detailed below.
3.1 The required movement permits and declarations may be issued **only** by the State Veterinarian responsible for the area of origin of the particular ostrich(es) according to Regulation 20 as proclaimed under the Animal Diseases Act 35 of 1984. The required movement permits and declarations may be issued only subject to the guidelines detailed below under 4, for each type of movement.

3.2 Any exemptions from the requirements in this protocol (including any exemptions in terms of Regulation 11, as proclaimed under the Animal Diseases Act 35 of 1984) may be granted only with the written approval of the 'director' referred to in Section 2 of the Animal Diseases Act 35 of 1984, National Department of Agriculture.

3.4 Applications for the granting of any exemptions from the requirements in terms of R.864 of 1 September 2006 and/or any amendment of this protocol should be made in writing to the Director: Animal Health, National Department of Agriculture.

4. The risk mitigation principles and requirements for state veterinary movement permits and declarations for the movement of all ostriches falling into the definition of poultry are as follows:

4.1 Ostriches (other than breeder birds) originating from registered compartments that have **NOT** tested serologically positive at any stage within the last 6 months may be moved to other registered compartments or to an abattoir for slaughter purposes provided they are accompanied by a **state veterinary declaration** issued by the state veterinarian responsible for the area of origin within the last 28 days certifying that

4.1.1 the premises of origin hold a **current registration as an approved compartment** according to the requirements listed below under 7.

and

4.1.2 the registered compartment of origin has been **tested serologically negative** (as detailed below under 5.1) with the provision that the movement occurs within a maximum of 28 days from the date of sampling.

4.2 Ostrich breeder birds originating from registered compartments may be moved only provided they are accompanied by a **state veterinary movement permit** issued by the state veterinarian responsible for the area of origin certifying that

4.2.1 the premises of origin hold a **current registration as an approved compartment** according to the requirements listed below under 7.

and

4.2.2 the registered compartment of origin has never in the past tested serologically positive for avian influenza AND is located more than 10 km distant from any farms with serologically positive results within the last 6 months

or

4.2.3 the ostrich breeder flock of origin was tested serologically negative (as detailed below under 5.) **WITH THE PROVISION** that such movements are subject to **prior written approval** by the Provincial Director: Veterinary Services as well as the State Veterinarian responsible for the area of destination.

or

4.2.4 the ostrich breeder flock of origin was tested serologically positive **AND** the ostriches are destined for another registered compartment in which the ostrich breeder flock tested positive in the past **WITH THE PROVISION** that such movements are subject to **prior written approval** by the Provincial Director: Veterinary Services as well as the State Veterinarian responsible for the area of destination.

4.3 Ostriches (other than breeder birds) originating from registered compartments that have tested serologically positive at any stage within the last 6 months may be moved only to an abattoir for...
slaughter purposes AND only provided they are accompanied by a state veterinary movement permit issued by the state veterinarian responsible for the area of origin within the last 28 days certifying that:

4.3.1 the premises of origin hold a current registration as an approved compartment according to the requirements listed below under 7.

and

4.3.2 the registered compartment of origin OR the group of slaughter birds has been tested negative for the H5 and H7 avian influenza infectious agents (as detailed below under 5.2), with the provision that the movement to the abattoir occurs within a maximum of 28 days from the date of sampling.

5. The principles for all laboratory testing for the purpose of certification of freedom from avian influenza are as follows.

5.1 All domestic ostrich farms have to register as compartments for this purpose and have to be tested serologically every 6 months as well as within the last 28 days prior to the movement of any ostriches off the premises. All mandatory 6-monthly and pre-movement serological testing has to be designed to detect the presence or absence of the exposure of ostriches to H5 or H7 avian influenza subtypes at >10% prevalence with 95% confidence in every epidemiological group (including all ostrich sizes and ages except for chicks younger than 6 weeks and ostrich breeder birds) on each farm; i.e. the number of birds to be tested depends on the size of each group on every farm as follows:

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<thead>
<tr>
<th>Size of the epidemiological group</th>
<th>No. of ostriches to be sampled</th>
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<td>≤ 10</td>
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<td>&gt; 500</td>
<td>29</td>
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All serological testing of ostrich blood samples are to be conducted by either of the three state veterinary laboratories designated for this purpose, namely Stellenbosch Veterinary Laboratory, Allerton Veterinary Laboratory or Onderstepoort Veterinary Institute.

All serological testing is to be conducted by the Haemagglutination Inhibition (HI) test to detect antibodies to avian influenza of H5 and H7 subtypes according to international standards (OIE Manual of Standards for Diagnostic Tests and Vaccines, 2003).

5.2 Every farm that yields positive results on any mandatory 6-monthly and pre-movement serological test (as detailed in 5.1) must undergo immediate **testing for detection of the infectious agent**. This initial testing for detection of the infectious agent has to be designed to detect presence or absence of H5 and H7 avian influenza subtypes at >5% prevalence with 95% confidence in every epidemiological group on each farm; i.e. the number of birds to be tested depends on the size of each group on every farm as follows:

<table>
<thead>
<tr>
<th>Size of the epidemiological group</th>
<th>No. of ostriches to be sampled</th>
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<tr>
<td>≤ 10</td>
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<td>≤ 4500</td>
<td>58</td>
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<tr>
<td>&gt; 4500</td>
<td>59</td>
</tr>
</tbody>
</table>

Provided the initial testing for detection of the infectious agent on farm level yields negative results, this status must be confirmed by further testing every 28 days, both serologically as well as for detection of the infectious agent. These subsequent mandatory monthly tests may be limited to the epidemiological group of slaughter-birds with appropriate sample numbers, according to the tables above, to be collected every 28 days either on the farm or at the abattoir. However, this does not replace the mandatory testing on farm level to be conducted every 6 months.

All testing for detection of the infectious agent is to be done by RT-PCR using H5 and H7 specific primers according to international standards at the Onderstepoort Veterinary Institute.

5.3  All laboratory tests that are conducted for the routine 6-monthly testing and for the purpose of certification / declaration of freedom from avian influenza for the movement of any ostriches are to be paid for by the owner of the animals. The costs of such testing will not be covered or reimbursed by the National Department of Agriculture.

6.  The guidelines for dealing with positive test results for avian influenza are as follows:

6.1  In the case of any positive laboratory test results for avian influenza, the state veterinarian responsible for the area, the Provincial Director: Veterinary Services AND the National Director: Animal Health (the ‘director’ referred to in Section 2 of the Animal Diseases Act 35 of 1984), have to be notified immediately.

6.2  A farm yielding positive laboratory test results is put under quarantine and an intensive investigation to confirm the diagnosis will be conducted. This investigation will include but is not limited to, the confirmation of test results by another laboratory, further serology and testing for the infectious agent (as detailed above under 5.), the collection of clinical and other epidemiologically relevant data, forward and backward tracing as well as testing of other farms in the area as applicable. The costs of the investigation will be covered or reimbursed by the Provincial and National Departments of Agriculture.

5.3  Once the investigation has been completed the National Director: Animal Health (the ‘director’ referred to in Section 2 of the Animal Diseases Act 35 of 1984), in conjunction with the Provincial Director: Veterinary Services, will make a decision as to the control measures to be applied which may include, but are not limited to, the following guidelines:

6.3.1  Culling of all poultry on the affected and possible in contact premises that will be the preferred option in cases with clinical symptoms WITH positive PCR or virus isolation results AND / OR with a high risk of area-wide spread.

6.3.2  Accelerated slaughter-out of all slaughter birds in cases without (or with inconclusive) clinical symptoms AND negative results on PCR and virus isolation AND low risk for area-wide spread. All such farms will remain under quarantine and the movement of ostriches off such farms will be limited to movements to the abattoir for slaughter purposes and is subject to the conditions listed above [4.3]. No movement of ostriches onto such farms will be allowed.

7.  The principle of compartmentalization requires that the owner / manager of any ostrich farm, on which ostriches are kept that fall under the definition of ‘poultry’, applies via the state veterinarian responsible for the area for registration of the farm as a compartment for the purpose of keeping ostriches. The application shall contain a written undertaking signed by the owner / manager that he / she undertakes to abide by all the requirements and keep all the required records as listed below. The signed application will be forwarded by the state veterinarian responsible to the Provincial Director: Veterinary
Services for recommendation and then to the National Director: Animal Health (the 'director' referred to in Section 2 of the Animal Diseases Act 35 of 1984) for official registration. The owner / manager of a registered compartment is required to abide by the following:

7.1 All movement of ostriches onto the premises may occur only from other registered compartments as supported by a state veterinary declaration issued by the state veterinarian responsible for the area of origin within the last 28 days prior to the movement. All movement of ostriches onto and off the premises are subject to the guidelines in this protocol. Accurate records of all movements, including copies / originals of all state veterinary declarations and movement permits accompanying all such movements are to be kept for at least 2 years.

7.2 The guidelines as set out in this protocol for 6-monthly and pre-movement laboratory testing will be complied with. The owner / manager undertakes to organize such required testing at his / her own cost and under conditions of official state veterinary notification / control. This implies that the state veterinarian responsible for the area will be notified in writing of the date and time of all proposed sampling of ostriches for test purposes at least one week in advance to afford for the opportunity of official auditing. The samples shall be submitted to an official laboratory with the costs to accrue to the owner and the state veterinarian's details included as the recipient for the results.

7.3 Accurate records will be kept of all morbidity and mortality and shall be available for auditing. The state veterinarian responsible for the area will be notified immediately of any unusual clinical cases. The owner / manager shall undertake to cooperate fully with any state veterinary animal disease investigations and control measures that may be implemented on the farm.

7.4 The owner / manager undertakes to comply with all biosecurity measures as outlined in the Annexure to this protocol and to establish and maintain written up-to-date standard operating procedures for each of the requirements – as well as written management records demonstrating compliance with the standard operating procedures for auditing purposes. A copy of the standard operating procedures shall be forwarded to the state veterinarian of the area for inclusion into the records of the registered compartment.

7.5 It should be noted that all registered ostrich compartments that wish to qualify for export purposes have to abide by the export requirements as set out in the relevant Veterinary Procedural Notices (VPN/04/2004-08 and VPN/04/2003-09), over and above the requirements set out in this protocol.

ANNEX 1
BIOSECURITY and TRACEABILITY (3 pages)

ANNEX 2
APPLICATION FORM FOR THE REGISTRATION OF APPROVED COMPARTMENTS FOR THE PURPOSE OF KEEPING OSTRICHES (2 pages).
BIOSECURITY AND TRACEABILITY

Biosecurity and disease monitoring in particular are an important aspect of disease control that need to be addressed in future to prevent further disease problems, especially avian influenza. The following applies to all domestic ostrich facilities that fall under the definition of 'poultry' according to the Terrestrial Animal Health Code of the World Organization for Animal Health (OIE).

According to Government Gazette Notice R864 of 1 September 2006 and the accompanying latest edition of the 'Ostrich Protocol', the following requirements are a prerequisite for the registration of a farm or facility as 'approved compartments for the purpose of keeping ostriches'.

1. Traceability

(a) All movement of ostriches onto the premises may occur only from other registered compartments as supported by a state veterinary declaration issued by the state veterinarian responsible for the area of origin within the last 28 days prior to the movement. All movement of ostriches onto and off the premises are subject to the guidelines in the Ostrich Protocol. Accurate records of all movements, including copies / originals of all state veterinary declarations and movement permits accompanying all such movements are to be kept for at least 2 years.

(b) Proper identification

All ostriches on the farm/holding have to be identified. This is essential to facilitate good record-keeping. The tag may be located under the wing or in the neck. It must be clearly readable once the ostrich has been caught and restrained. All ostriches above the age of 3-4 months have to be tagged, but definitely before any movement occurs. If ostrich chicks at a younger age are to be moved, they have to be tagged at a younger age, prior to movement.

A unique ostrich tag (4 months and older) with a unique identification number must be used. It is applied by an official vaccinator and the numbers with the designated registered farm details submitted to the central database of the SAOBC.

(c) Movement control


Over and above the requirements of the latest edition of the ostrich protocol, all ostriches destined for slaughter at an export abattoir must move with a passport with a permit number as allocated by the SAOBC where the number will also be kept in the central database. All movements [origin, destination, permit number etc.] must be kept on record by the producer.

(d) Records

All producers must keep the following records which must be available for inspection or auditing by an official of the competent authority.

- Monthly stock record [to be submitted at the end of the month to the SAOBC]
2. Surveillance

The guidelines as set out in the latest edition of the Ostrich Protocol for 6-monthly and pre-movement laboratory testing must be complied with. The owner/manager must undertake to organize such required testing at his/her own cost and under conditions of official state veterinary notification/ control. This implies that the state veterinarian responsible for the area will be notified in writing of the date and time of all proposed sampling of ostriches for test purposes at least one week in advance to afford the opportunity of official auditing. The samples shall be submitted to an official laboratory with the costs to accrue to the owner and the state veterinarian’s details included as the recipient for the results.

3. Morbidity and mortality

Accurate records must be kept of all morbidity and mortality and shall be available for auditing. The state veterinarian responsible for the area must be notified immediately of any unusual clinical cases. The owner/manager shall undertake to cooperate fully with any state veterinary animal disease investigations and control measures that may be implemented on the farm.

4. Biosecurity

The owner/manager undertakes to comply with all biosecurity measures as outlined below. The owner/manager also undertakes to establish and maintain written up-to-date standard operating procedures for each of the requirements — as well as written management records demonstrating compliance with the standard operating procedures for auditing purposes. A copy of the standard operating procedures shall be forwarded to the state veterinarian of the area for inclusion into the records of the registered compartment.

(a) Separation of species:
There should be no other domestic bird species kept in close contact with ostriches. These include ducks, geese, free range/backyard fowl and turkeys. Pigs should also not be kept in close contact with the ostriches.

(b) Wild birds, especially wild water birds should be discouraged from having contact with the ostriches. Ostriches should not be kept in camps where there are open pans or vlei areas. Such an area should be properly fenced off to prevent access by ostriches.

(c) Workers should be prohibited to keep their own poultry, either at dwellings on the farm itself or at houses away from the farm.

(d) Feed:
(i) Supply
Feed troughs should consist of structured troughs lifted from the ground to discourage visitations by wild birds.
Sufficient and regular feed should be supplied to ensure there is no unnecessary left over feed to attract wild birds.
Ostrich Protocol

(e) Water:
   (i) Supply
       The supply of water for ostriches should consist of structured water troughs in properly constructed and dedicated areas that supply water without attracting wild water birds.
       Water trough should be cleaned and disinfected on a weekly basis at least or as determined by risk factors.

   (ii) Disinfection
       Drinking water should be disinfected with a suitable disinfectant to inactivate any possible influenza virus without harming the ostriches.
       Registered disinfectants that could be used include: F10, Virukill, Virkon or standard water chlorination methods (1-3 ppm).

   (iii) Irrigation canals
       In areas where camps are linked by means of irrigation canals these canals have to be fenced off. This will prevent faecal material from ostriches from being transported to neighbouring camps along the route of the canal system.

(f) Access control must be implemented and the farm must clearly display the production unit function (e.g. Breeder, hatchery, grower etc.) access control requirements and farm registration.

Records on all of the above must be available for auditing by the competent authority.

5. General

It is highly recommended that producers make use of a herd health veterinarian to supplement their health program and assist in early disease surveillance and control. It is essential that all ostrich farmers and their veterinarians liaise closely with their respective State Veterinarian. Transparency is essential and any outbreak of disease, or suspected outbreak of disease has to, according to the Animal Diseases Act (Act 35 of 1984), be reported to the State Veterinary Services. This will ensure that the presence and nature of the disease is established without delay and necessary measures can be instituted by the veterinary authority to control losses and prevent the potential spread of the disease.

6. Export farms

It should be noted that all registered ostrich compartments that wish to qualify for export purposes, have to abide by the export requirements as set out in the relevant Veterinary Procedural Notices (VPN/04/2004-08 and VPN/04/2003-09), over and above the requirements set out in the Ostrich Protocol.
APPLICATION FOR THE REGISTRATION OF AN OSTRICH ESTABLISHMENT(S) AS AN APPROVED COMPARTMENT FOR THE PURPOSE OF KEEPING OSTRICHES

For attention: Dr. Julia Panné-Reeves    Fax: (012) 329 6892


1) Name of establishment: ____________________________

2) Owner: ____________________________

3) Postal address: ____________________________________________  Code: __________

4) Tel no: ____________________________

5) Farm name(s) & number(s) & coordinates according to magisterial district map (1:50 000 scale map): (Attach separate signed sheet for additional records)

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<thead>
<tr>
<th>Farm name</th>
<th>Farm number</th>
<th>Geographical coordinates</th>
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6) Old Magisterial / New Municipal district: ____________________________  Code (current OIE report code): ______

7) Type of establishment: ________________________________________________

   Breeder  Hatchery  Rearing  Slaughter

I, ____________________________, (full name and surname), OWNER OF THE ABOVE MENTIONED FARM(S), HEREBY CONFIRM THAT:

(1) ALL THE INFORMATION SUPPLIED BY ME ON THIS APPLICATION FORM, IS TO THE BEST OF MY KNOWLEDGE TRUE AND CORRECT.

(2) I ALSO UNDERTAKE TO ABIDE BY ALL THE REQUIREMENTS AND KEEP ALL THE RECORDS AS STIPULATED IN THE GOVERNMENT GAZETTE NOTICE R 854 OF 1 SEPTEMBER 2006 AND THE LATEST EDITION OF THE OSTRICH PROTOCOL.

(3) I ALSO UNDERSTAND THAT, SHOULD I WISH TO EXPORT, I HAVE TO ABIDE BY THE EXPORT REQUIREMENTS AS SET OUT IN THE RELEVANT VETERINARY PROCEDURAL NOTICES (VPN/04/2004-8 AND VPN/04/2003-09).

(4) I HAVE RECEIVED A COPY OF THE OSTRICH PROTOCOL.

Signature of the owner: ____________________________  Date: __________

Page 1 of 2
1) Name of establishment: ____________________________

2) Owner: ____________________________

3) Postal address: ____________________________
   Code: ____________________________

4) Tel no: (______) ____________________________

5) Farm name(s) & number(s) & co-ordinates according to magisterial district map (1:50 000 scale map):
   (Attach separate signed sheet for additional records)

I, DR ____________________________, THE STATE VETERINARIAN OF
HEREBY CONFIRM THAT ALL THE INFORMATION SUPPLIED TO ME ON THE APPLICATION FORM BY
THE OWNER OF THE FARM(S), IS TO THE BEST OF MY KNOWLEDGE TRUE AND CORRECT AND THAT:

(1) I HAVE AUDITED THE TESTING PROCEDURES AND RESULTS FROM THE ESTABLISHMENT(S) AND
FOUND THEM TO COMPLY WITH THE OSTRICH PROTOCOL FOR AN APPROVED COMPARTMENT
FOR THE PURPOSE OF KEEPING OSTRICHES

(2) I HAVE INSPECTED THE ESTABLISHMENT AND FOUND IT TO HAVE BIOSECURITY MEASURES IN
PLACE TO PROVIDE AN APPROPRIATE LEVEL OF PROTECTION, AS SPECIFIED IN THE LATEST
EDITION OF THE OSTRICH PROTOCOL.

(3) I HAVE SUPPLIED THE OWNER OF THIS FARM WITH A COPY OF THE OSTRICH PROTOCOL.

Remarks: ____________________________

Signature of Provincial State Veterinarian: ____________________________
   Date: ____________________________

I, DR ____________________________, IN MY CAPACITY AS THE HEAD / DIRECTOR OF VETERINARY
SERVICES IN THE PROVINCE: ____________________________, HEREBY CONFIRM THAT SUFFICIENT
RESOURCES ARE AVAILABLE TO MONITOR THE CONDITIONS ON THE ABOVE MENTIONED FARM(S)
ON A REGULAR BASIS AS STIPULATED IN THE LATEST EDITION OF THE OSTRICH PROTOCOL FOR AN
APPROVED COMPARTMENT FOR THE PURPOSE OF KEEPING OSTRICHES

Remarks: ____________________________

Signature of Provincial Director: ____________________________
   Date: ____________________________

Official National Reg. No: ____________________________
   Date: ____________________________