

Paper to Inform Community Discussion on Options - Biosecurity - Livestock and Reproductive Material Imports into Norfolk Island

November 2018

In July 2018, Members of the Norfolk Island Community raised concerns about biosecurity restrictions with the former Minister, the Hon John McVeigh MP. Since that time, the Hon Sussan Ley MP (Sussan) has worked with her Ministerial colleagues to identify options that may be available to address these concerns.

Ensuring Norfolk Island's unique biosecurity status is protected, while also supporting businesses to operate and contribute to the local community is a challenge. Finding a balance is not always straight forward, as evidenced by the broad discussions at the community meeting on 7 November 2018.

Work undertaken by the Department of Agriculture and Water Resources and the Department of Infrastructure, Regional Development and Cities has identified five options for the importation of live ruminants and reproductive material into Norfolk Island. The options include:

1. Importing ruminant reproductive material (semen and embryos)
2. Importing live ruminants into Norfolk Island and establishing a quarantine station on the island or ruminants undertaking a period of quarantine on the Australian mainland
3. Importing live ruminants from Australia from properties that have a lower disease risk status with little to no quarantine period
4. Importing live ruminants from New Zealand
5. Amending the *Biosecurity Act 2015* to treat Norfolk Island ruminant health status the same as the Australian mainland.

Each of these options carry different levels of biosecurity risk and vary in cost and logistics.

The purpose of today's meeting is to discuss these options, and alternative views. This discussion will assist to identify a preferred approach moving forward.

See **Attachment A** for a list of options for discussion at this meeting.

See **Attachment B** for background about importing live ruminants and horses to Norfolk Island.

Table 1: Options for importing live ruminants and reproductive material into Norfolk Island

Option 1 Importing ruminant reproductive material (semen and embryos)	Pros	<ul style="list-style-type: none"> - This option has been assessed by the Department of Agriculture and Water Resources as the approach that provides the strongest assurances against animal disease introduction. - Biosecurity risks are assessed as managed acceptably and within the Appropriate Level of Protection (ALOP) of the <i>Biosecurity Act 2015</i>. - This approach provides herd improvement to all livestock owners, not just those with the resources to meet high costs of providing livestock animals sourced for export and low risk for disease introduction. - Developing skills on Norfolk Island could also be a successful community project involving all livestock owners to manage costs and achieve broader sustainable community benefits. - This technology is widely used particularly in the Australian dairy industry with almost all dairy cattle artificially inseminated. Heat synchronisation programs for beef cattle are well established and proven to be effective. - Lower conception rates for sheep and goats using frozen semen can be overcome by insemination using laparoscopic techniques. - Alternatively, the use of fresh goat and sheep semen may be possible if logistical barriers can be overcome. - Liquid nitrogen containers, dry shippers used for moving semen and embryo around the world have long refill intervals. International trade in frozen semen and embryo is well established. - These practices are successfully applied in developing countries with limited infrastructure. - Well conducted artificial insemination programs deliver conception rates that approach natural mating. - These techniques are regarded as routine techniques that local cattle owners with the help of local veterinarians could be trained to achieve (particularly artificial insemination).
	Cons	<ul style="list-style-type: none"> - Frozen goat and sheep semen requires laparoscopic techniques to achieve high conception rates. This requires a technical expert to be involved.
	Resource Implications	<p>Low. The equipment and veterinary drugs necessary to carry out successful artificial insemination programs are relatively inexpensive and likely to be much less than the cost of for example purchasing and importing a herd bull. Contracting of veterinarian with expertise in reproductive technologies is likely to add additional costs. It is possible that a training programs delivered to local livestock owners and island veterinarians could build the skills to reduce the reliance on external expertise to conduct such a program more sustainably. This could represent an opportunity to work with local people to build artificial reproduction skills. This could potentially be a community building activity. DIRDC may be able to provide a small grant to assist this process.</p>

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Option 2 Importing live ruminants into Norfolk Island and establishing a quarantine station on the island or ruminants undertaking a period of quarantine on the Australian mainland	Pros	<ul style="list-style-type: none"> - New live ruminants would be available, which would be seen as beneficial by some residents. - A quarantine station on Norfolk Island could provide job opportunities to local residents. - Upgrades to the first point of entry could create job opportunities.
	Cons	<ul style="list-style-type: none"> - This option is cost prohibitive i.e. very high costs to establish a first point of entry and quarantine facility on Norfolk Island or use the quarantine facility on the Australian mainland. - Use of the quarantine station on the Australian mainland has not been assessed or approved i.e. the quarantine facility may not have the required room, availability and infrastructure to house domestic ruminants for the quarantine period. There may be additional costs to upgrade the existing facility. - May not be enough volume of live ruminant trade or economic benefits to justify large-scale expenditure. - If using a quarantine facility on Norfolk Island, there may be a need to 'fly-in' veterinary expertise from the Australian mainland for extended period of time with costs being passed onto the user of the facility. - Would require live ruminants to remain in quarantine for a significant time period. - Would not provide assurance, in accordance with ALOP, that serious diseases would not be introduced despite lengthy quarantine period. - Would be significant costs preparing animals to meet basic biosecurity requirements and in chartering aircraft to transport live ruminant consignments. Increased risk of disease incursion (cf. germplasm imports). - Would be a need for increased disease testing of Norfolk Island ruminant population and associated costs. - Risks associated with introducing serious ruminant diseases to Norfolk Island i.e. likelihood of introduction is medium-high despite high costs associated with lengthy quarantine period. - Medium-high risk of introducing Q fever to humans given on-island slaughter practices and free roaming livestock. - Some Norfolk Island residents may have concerns their ruminants or human health may be at risk by enabling ruminant imports. - Costs are likely to be borne by the Norfolk Island livestock industry in managing new livestock diseases on-island and issues associated with diseases that can be passed onto humans. - Costs for Q fever immunisations (noting not all people may be able to or willing to receive immunisations).
	Resource Implications	<p>Extremely high. This option is unlikely to be able to be funded by the local Norfolk Island livestock industry, businesses or receive Australian Government funding or priority. There are likely to be implications and costs associated with the introduction of new ruminant diseases that are likely to impact the Norfolk Island livestock industry.</p>
Option 3 Importing live ruminants from Australia from properties that	Pros	<ul style="list-style-type: none"> - New live ruminants would be available on the island, which would be seen as beneficial by some residents. - Live ruminants would be imported timelier and potentially lower cost than the other live ruminant import options.
	Cons	<ul style="list-style-type: none"> - Cost prohibitive i.e. very high costs to establish a first point of entry and quarantine facility on Norfolk Island, would require a large amount of financial support from the Australian Government to establish and operate. - Risks associated with introducing serious ruminant diseases to Norfolk Island i.e. likelihood of introduction is medium-high despite high costs associated with quarantine period.

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<p>have a lower JD risk with little to no quarantine period</p>		<ul style="list-style-type: none"> - Use of the quarantine station on the Australian mainland has not been assessed or approved i.e. the quarantine facility may not have the required room, availability and infrastructure to house domestic ruminants for the quarantine period. There may be additional costly upgrades to the existing facility needed. - Farm herd testing in Australia to identify disease free herds from which animals for export can be sourced is not practical because of the high cost and regulatory supervision required. - Even with an intensive herd of origin testing program for the disease recognised as significant this approach will be higher risk of disease introduction compared with use of artificial breeding technology. - May not be enough volume of live ruminant trade or economic benefit to justify large-scale expenditure. - If using a quarantine facility on Norfolk Island, there would be a need to 'fly-in' veterinary expertise and biosecurity officers from the Australian mainland for extended period of time with costs being passed onto the user of the facility. - There would be significant costs in preparing animals to meet basic biosecurity requirements and also in chartering an aircraft to transport the live ruminants. - Would be a need for increased disease testing of Norfolk Island ruminant population and associated costs. - Medium–high risks of introducing Q fever to humans given on-island slaughter practices and free roaming livestock. - Some Norfolk Island residents may have concerns their ruminants or human health may be at risk by enabling ruminant imports. - Costs likely to be borne by the Norfolk Island livestock industry in managing new livestock diseases on-island and issues associated with diseases that can be passed onto humans - Costs for Q fever immunisations (noting not all people may be able to or willing to receive immunisations).
	<p>Resource Implications</p>	<p>Very high. While the costs and timeliness associated with option 3 are lower than option 2 if quarantine period was reduced. The costs associated with option 3 are still significant and pose a medium–high biosecurity risk. There are likely to be implications and costs associated with the introduction of new ruminant diseases that would need to be borne by the Norfolk Island livestock industry.</p>
<p>Option 4</p> <p>Importing live ruminants from New Zealand</p>	<p>Pros</p>	<ul style="list-style-type: none"> - New live ruminants would be available on the island, which could be seen as beneficial by some residents.
	<p>Cons</p>	<ul style="list-style-type: none"> - There is no other country that would be able to satisfy all pest and disease concerns for Norfolk Island in accordance with ALOP e.g. New Zealand has Johne’s disease (JD), virulent footrot, tuberculosis and enzootic bovine leucosis.
	<p>Resource Implications</p>	<p>Very high. Similar to option 2, the costs associated with option 4 are still significant and would pose a high biosecurity risk. There are likely to be implications and costs associated with the introduction of new ruminant diseases that would likely need to be borne by the Norfolk Island livestock industry.</p>
<p>Option 5</p>	<p>Pros</p>	<ul style="list-style-type: none"> - New live ruminants would be available on the island, which could be seen as beneficial by some residents.
	<p>Cons</p>	<ul style="list-style-type: none"> - This option is inconsistent with existing requirements to manage biosecurity on Norfolk Island i.e. the existing approach recognises and protects the island’s unique biosecurity status. A revised policy decision would be needed from

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Amending the <i>Biosecurity Act 2015</i> to treat Norfolk Island ruminant status the same as the Australian mainland		Government to support any amendments to the legislation that socialise the island's biosecurity status with that of the mainland. - Some residents may not agree with potential risks to their ruminants or human health – public consultation on Norfolk Island and the Australian mainland would be required.
	Resource Implications	Previous costs would apply.

Background – Importing live ruminants into Norfolk Island

The Legislation and Role of the Department of Agriculture

The Department of Agriculture has a legislated responsibility to protect Norfolk Island's animal health status. Under the *Biosecurity Act 2015*, all live ruminant imports are required to have an import permit.

When a permit application is received, the Department of Agriculture undertakes scientific assessments of the biosecurity risks and, if the biosecurity risks can be managed, an import permit will be granted outlining the conditions.

The Director of Biosecurity must apply the Appropriate Level of Protection (ALOP) in conducting a risk assessment for the purpose of deciding whether to grant the permit. The ALOP for Norfolk Island includes consideration of Norfolk Island's unique ruminant health status. Norfolk Island's ALOP, as defined in the Act, is 'a high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to very low, but not to zero'.

Norfolk Island Status

Norfolk Island has been assessed as having an animal health status more favourable to most countries in the world. It is free from a number of serious diseases that affect ruminants which are present in mainland Australia.

Some of these diseases include Johne's disease (JD)¹, virulent footrot and Q fever.

Of highest concern is the potential introduction of JD which is a disease present in Australia and poses a biosecurity risk to Norfolk Island. The Department of Agriculture and Water Resources has recent evidence where animals sourced from Australian herds were identified as low risk—after rigorously applied programs—and still resulted in disease transmission following movement of livestock. Other disease/pests of more limited distribution on mainland Australia (and also not found on Norfolk Island) include cattle tick, *babesia bovis*, *babesia bigemina* and *anaplasma marginale* (cattle tick spread parasites).

The animal health status of Norfolk Island was determined in the Norfolk Island Quarantine Survey conducted by the department between 2012 and 2014, taking into account the island's current health status and historical records. The survey data indicates:

- Norfolk Island is free of a number of significant ruminant diseases, such as JD, virulent footrot and Q fever, which are present on the Australian mainland.

In addition, virulent footrot and Q fever are not nationally notifiable diseases in Australia, making it difficult to assess the disease status in each state and to verify the health status of individual herds or flocks.

The Department of Agriculture has discussed ruminant importation at length with various stakeholders on Norfolk Island, including the Norfolk Island Cattleman's Association, the Norfolk Island Mayor and members of the community that own ruminants on the island. Although views were mixed, the overall consensus of those

¹ JD is a chronic and debilitating disease with a long incubation period that is very difficult to eradicate once established in a herd. In Australia, JD has caused a decrease in production for the dairy sector, premature death of productive animals and market access implications. If this disease established in Norfolk Island, it could impact the health of local ruminants and cause economic losses for businesses across the island. Due to the nature of these diseases, there are currently no economically feasible conditions that can be applied to allow the importation of live ruminants into the island that sufficiently manages the risk of introduction of these diseases.

consulted was that the high health status of Norfolk Island ruminant population was important to them. Communication about the import conditions for live ruminants and reproductive material has been provided to Norfolk Island stakeholders in newspaper articles and emails.

Importation of Reproductive Material

The Department of Agriculture and Water Resources has developed conditions for the importation of ruminant reproductive material (semen and embryos) into Norfolk Island from Australia.

Ruminant reproductive material from the mainland that are collected according to procedures outlined by the World Organisation for Animal Health (OIE) terrestrial code represents a much lower risk for the introduction of serious ruminant diseases than live animals.

The Department of Agriculture and Water Resources has requested the Department of Infrastructure, Regional Development and Cities (DIRDC) consider funding a reproductive material solution for the island.

Importing live horses into Norfolk Island

Under the *Biosecurity Act 2015*, all live horse imports require an import permit and must meet specific biosecurity import conditions prior to arrival on the island. Import conditions are established based on results of biosecurity risk analysis.

The Department of Agriculture and Water Resources has assessed the biosecurity risk posed to Norfolk Island by horses imported from Australia and New Zealand, and has applied import conditions to reduce the risk of disease introduction.

The department's approach to horse imports is consistent with the approach to ruminant imports—the department assesses each permit application with regard to risks the import might pose to Norfolk Island's animal health status.

Horses are not ruminants, and are not affected by JD. Horse diseases present on the Australian mainland and New Zealand that could pose a risk to Norfolk Island have been assessed and determined to be minimal. Biosecurity measures can be applied to manage those risks.