

## Management Plan for the Peregrine Falcon

Changes between the 2015 and 2017 versions of the document by section.

### Preface:

| Old text (2015 document):   | New text (2017 document):                                  |
|---|--|
| “Minister of the Environment”                                     | “Minister of Environment and Climate Change”               |
| “the Hunting, Fishing and Trapping Coordinating Committee Board.” | “the Hunting, Fishing and Trapping Coordinating Committee” |

### Acknowledgements:

Minor corrections were made to names in this section.

### Executive Summary:

| Old text (2015 document):  | New text (2017 document):   |
|--|---|
| The objective of this management plan is to maintain the Peregrine Falcon anatum/tundrius population at at least the level reached in 2010 within its Canadian range in the 10 years following publication of the final version of this management plan. | The objective of this management plan is to maintain a self-sustaining <sup>3</sup> population of the Peregrine Falcon anatum/tundrius throughout its Canadian range for the next 10 years.   |
|  | <sup>3</sup> A population that, on average, remains stable or demonstrates positive population growth, as found in 2010, and is large enough to withstand stochastic events and persist in the long term without the need for permanent active management intervention. |
| protection of nesting sites  | legal protection of nesting sites   |

### Section 2: Species Status Information

| Old text (2015 document):   | New text (2017 document):  |
|---|--|
| NatureServe (2013)  | NatureServe (2015)   |
| New Brunswick <i>Endangered Species Act</i>                           | New Brunswick <i>Species at Risk Act</i>   |
| The species is protected under the Migratory Birds Treaty Act of 1918 | The species is protected under the U.S. <i>Migratory Bird Treaty Act of 1918</i> |

### Section 3.1 Species Description

| Old text (2015 document):  | New text (2017 document):  |
|--|--|
| Juveniles resemble the adults, but are light brown to slate brown or chocolate brown above, with buff underparts barred with blackish brown. | Juveniles resemble the adults but have light brown to slate brown or chocolate brown upperparts and blackish-barred buff underparts. |

### Section 3.2 Population and Distribution

| Old text (2015 document):   | New text (2017 document):  |
|---|--|
| <p>By 1969, the population in northern Canada was estimated at 7,500 pairs (Fyfe 1969). According to a recent analysis based on mark-recapture data from banded Peregrine Falcons in North America and Greenland between 1970 and 2010, the breeding population migrating along the Atlantic and Central flyways was estimated at approximately 93,000 adults. At the turn of the century, the number of adult and juvenile Peregrine Falcons using these two flyways was roughly 125,500 (A. Franke, pers comm. 2015).</p> | <p>In 1969, Fyfe (1969) estimated the population in northern Canada at 7,500 breeding pairs. Based on a recent analysis using mark-recapture data for banded Peregrine Falcons in northern North America and Greenland between 1970 and 2010, the northern breeding population has been estimated at more than 15,000 pairs (Franke 2016). In addition, there could be up to 30,000 non-breeding adults (Franke 2016).</p> |

### 3.3 Needs of the Peregrine Falcon

| Old text (2015 document):        | New text (2017 document):     |
|----------------------------------|-------------------------------|
| various anthropogenic structures | various human-made structures |

### 4.1 Threats

| Old text (2015 document): | New text (2017 document):     |
|---------------------------|-------------------------------|
| Harvest for falconry      | Legal harvesting for falconry |

### 4.2 Description of threats

| Old text (2015 document):   | New text (2017 document):   |
|---|---|
| These threats do not apply evenly to the entire Canadian Peregrine Falcon population.   | The threats do not affect the entire Canadian Peregrine Falcon population uniformly.  |
| a memorandum to pest control agents   | a memorandum to pest bird control companies   |
| The harvesting of Peregrine Falcon <i>anatum/tundrius</i> for falconry is currently banned in most of Canada. However, Saskatchewan has allowed a small harvest of juvenile passage migrants since 2001 (Rowell 2002).                          | The harvesting of Peregrine Falcon <i>anatum/tundrius</i> for falconry is currently banned across Canada, except in Saskatchewan, which has allowed a small harvest of passing juvenile migrants since 2001 (Rowell 2002).                                    |
| Although the COSEWIC status report (2007) identifies harvesting for falconry as a threat, the current level of the harvest is, according to Millsap and Allen (2006), below the level that could harm the species. Population modelling results | Although the COSEWIC status report (2007) identifies the harvest for falconry as a threat, according to Millsap and Allen (2006) the current level of harvesting in North America is below the threshold that would be detrimental to the species. Population |

|   |   |
|---|---|
| <p>indicate that the allowed harvest limits in the United States do not have a significant impact on the size of the population and that available estimates of vital rates justify a harvest rate of juvenile Peregrine Falcon <i>anatum/tundrius</i> in North America of up to 5% of annual production (Millsap and Allen 2006). It is recommended that the model be validated to ensure that the harvest does not compromise the species' recovery. Doing so is difficult, however, due to logistical and financial constraints and to the time required to collect the necessary data. The USFWS proposed monitoring the number, sex and geographic distribution of captured falcons. Falcon population and harvest data in Canada, the United States and Mexico will be reviewed every five years, or at the request of the flyway councils, to reassess the allowed harvest limits (USFWS 2008b).</p> <p>It should be noted that falconry was added to the Representative List of the Intangible Cultural Heritage of Humanity by the United Nations Educational, Scientific and Cultural Organization in 2012 (UNESCO 2010).</p> | <p>modelling results indicate that the allowed take in the United States does not have a significant impact on the size of the population and that available estimates of vital rates permit the harvest of a certain number of juvenile Peregrine Falcon <i>anatum/tundrius</i> (Millsap and Allen 2006). It is recommended that the model be validated to ensure that this harvest does not compromise the species' recovery. More recently, based on the USFWS harvest guidelines and the annualized estimate of hatch-year falcons, Franke (2016) concluded that a small harvest could take place without a negative impact on the breeding population.</p> |
| <p>The illegal shooting of Peregrine Falcons is a practice that still exists.. For instance, 9.1% (n=99) of the Peregrine Falcons sent to the raptor clinic of the University of Montreal's Faculty of Veterinary Medicine had been killed or injured by gunshot</p>  | <p>The illegal shooting of Peregrine Falcons is a practice that still exists. For example, 9.1% (n=99) of Peregrine Falcons brought in to the Clinique des oiseaux de proie at the Université de Montréal's Faculty of Veterinary Medicine had been killed or injured by bullets</p>  |
| <p>The impact of recreational activities is mostly localized in inhabited or nearby areas.</p>  | <p>The impact of recreational activities is mostly localized in inhabited areas.</p>  |
| <p>The effects of disturbances [from exploration and development] are comparable to those identified for recreational activities.</p>   | <p>(sentence removed)</p>   |

|  |  |
|--|--|
| The impact of infrastructure renovation and maintenance activities are mostly located within inhabited areas or areas near them.                 | The impact of infrastructure maintenance activities is mostly concentrated in inhabited areas or areas near them.  |
| <b><i>Collisions with transportation or other infrastructure</i></b>   | <b><i>Collision with infrastructure or means of transportation</i></b>   |
| vulnerable to weather-related environmental conditions   | vulnerable to extreme-weather-related environmental conditions   |
| The species could also be indirectly affected by natural changes in climate conditions or by the effects of climate change on food availability. | The species could also be indirectly affected by the effects of climate change on food availability or by natural changes in climatic conditions such as El Niño, if there is an increase in their frequency or intensity. |

## 5. Management Objective

| Old text (2015 document):   | New text (2017 document):  |
|---|--|
| The objective of this management plan is to maintain the Peregrine Falcon <i>anatum/tundrius</i> population at at least the level reached in 2010 within its Canadian range in the 10 years following publication of the final version of this management plan.   | The objective of this management plan is to maintain a self-sustaining <sup>15</sup> population of the Peregrine Falcon <i>anatum/tundrius</i> throughout its Canadian range for the next 10 years.<br><br><sup>15</sup> A population that, on average, remains stable or demonstrates positive growth in the short term, as found during the last five-year survey in 2010, and is large enough to withstand stochastic events and persist in the long term without the need for ongoing active management intervention.        |
| Natural nesting habitat is still available, and the species also has anthropogenic structures for nesting that it already uses or that it may use in the future. It is therefore reasonable to believe that the population may stabilize or even increase through existing and new conservation measures. Given that the last five-year Peregrine Falcon survey in Canada was in 2010, it is used as a reference to verify the achievement of the objectives. | Natural nesting habitat is still available, and the species also has human-made structures for nesting that it already uses or that it may use in the future. It is therefore reasonable to believe that the population is self-sustaining and that Peregrine Falcon <i>anatum/tundrius</i> numbers could be maintained or even increased through existing and new conservation measures as well as through threat monitoring. Given that the last five-year Peregrine Falcon survey in Canada was conducted in 2010, it is used |

|  |  |
|--|--|
|  | <p>as a reference to assess achievement of the objectives. The 2010 surveys showed that at least 610 sites were occupied by the Peregrine Falcon. That number is more representative of the population that breeds in southern Canada, as few surveys are conducted in northern Canada. However, because the five-year survey is the only one conducted regularly and the only one that covers such a large territory, it is a valuable source of data for measuring progress toward achievement of the objectives. The results of bird counts performed by the raptor observatories in Canada and the United States can also assist in monitoring the status of the population.</p> |
|--|--|

## 6.2 Broad Strategies

| Text changed from (2015 document)  | Text changed to (2017 document)  |
|--|--|
| Such measures can be implemented by various stakeholders (governments, land use managers, non-governmental organizations, citizens). | Such measures can be implemented by various stakeholders (governments, land use managers, non-governmental organizations, falconers, citizens) |

## 6.3 Conservation Measures

| Text changed from (2015 document)   | Text changed to (2017 document)  |
|---|--|
| Participate in the assessment of effects of authorized harvesting in the United States, Canada and Mexico on the North American Peregrine Falcon populations and work with stakeholders, provinces, territories and international authorities to establish a harvest level based on scientific data that does not affect the achievement of the management objective. - Low | Participate in the assessment of effects of authorized harvesting in the United States, Canada and Mexico on the North American Peregrine Falcon populations and work with stakeholders, provinces, territories and international authorities to maintain a harvest level that does not affect the achievement of the management objective. - Medium |
| Promote the implementation of nesting site conservation and, if possible, legal protection measures by provinces and territories that have not yet implemented such measures  | Promote the implementation of nest site conservation measures and, if possible, legal protection measures, in places where this has not yet been done.   |
|   |  |

## 7. Measuring Progress

| Old text (2015 document):   | New text (2017 document):   |
|---|---|
| the <b>population and distribution</b> objectives   | the <b>management</b> objective   |
| By 2026, the entire Peregrine Falcon <i>anatum/tundrius</i> population <b>is stabilized at</b> or has exceeded the population level reached in 2010.    | By 2026, the entire Peregrine Falcon <i>anatum/tundrius</i> population <b>remains self-sustaining and has maintained</b> or exceeded the population level reached in 2010.                  |
|   | <b>By 2026, the entire Peregrine Falcon <i>anatum/tundrius</i> population in Canada has maintained or increased its Canadian range as identified in 2010.</b>                               |
| By 2026, the number of young Peregrine Falcons <i>anatum/tundrius</i> produced annually in Canada is sufficient to maintain or increase the population. | By 2026, the number of young Peregrine Falcon <i>anatum/tundrius</i> produced annually in Canada is sufficient to maintain or increase the population <b>throughout its Canadian range.</b> |

## 8. References

In addition to the revisions and additions below, minor corrections were made to many of the references, and web sites were added to a few references.

| Text changed from (2015 document)   | Text changed to (2017 document)   |
|---|---|
| Franke, A. pers. comm. 2015. Comment received in July 2015. Adjunct Academic Canadian Circumpolar Institute University of Alberta.  | Franke, A. 2016. Population estimates for Northern Juvenile Peregrine Falcons with implications for harvest levels in North America. <i>Journal of Fish and Wildlife Management</i> 7(1) 36-45.   |
| UNESCO. 2012. Representative List of the Intangible Cultural Heritage of Humanity. Available at: <a href="http://www.unesco.org/culture/ich/index.php?lg=fr&amp;pg=00011&amp;RL=00732">http://www.unesco.org/culture/ich/index.php?lg=fr&amp;pg=00011&amp;RL=00732</a> (accessed October 16, 2015). | UNESCO. 2012. Falconry, a living human heritage. <a href="http://www.unesco.org/culture/ich/en/RL/falconry-a-living-human-heritage-01209">http://www.unesco.org/culture/ich/en/RL/falconry-a-living-human-heritage-01209</a> (accessed November 8, 2016). |
|   | Tremblay, J. A., P. Fradette, F. Shaffer and I. Gauthier. 2012. Inventaire quinquennal 2010 du faucon pèlerin au Québec méridional : état de la population  |

|  |  |
|--|--|
|  | québécoise. Naturaliste canadien<br>136: 88-93 |
|--|--|