

## National Flyway Council Peregrine Falcon ad hoc Committee Report

### Committee Members:

Robert Ellis- Committee Chair, Atlantic Flyway Council, VA Dept of Game and Inland Fisheries  
Mark Howery- Central Flyway- Wildlife Diversity Biologist, Okla. Department of Wildlife Conservation  
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Shelly Kremer- Central Flyway- Dove Program Specialist, Texas Parks and Wildlife, Austin, TX  
Chris McGrath- Atlantic Flyway- Wildlife Diversity Program Coordinator, NC Wildlife Resources Com.  
Brian Millsap- Fish and Wildlife Service Research Biologist, Albuquerque NM.

### Purpose and Goal:

The Peregrine Falcon ad hoc Committee was formed in the fall of 2010 to assess the process through which passage Peregrine Falcon trapping/take permits have been allocated between flyways and to explore potential alternatives to the process that was used in the fall of 2009 and the fall of 2010. The goals of the Peregrine Falcon ad hoc Committee are to find an allocation method or formula that distributes the available passage take permits in a manner that is agreeable to the three applicable Flyways (Atlantic, Mississippi and Central) and provides the maximum opportunity for falconers to trap falcons in the participating states (i.e. those states that have promulgated rules that allow for the passage harvest of first-year Peregrine Falcons).

The Peregrine Falcon ad hoc Committee made a purposeful distinction between maximizing trapping opportunity versus maximizing trapping success because it was the understanding of the majority of the Committee members that the majority of falconers wanted to have the opportunity to trap passage birds in their state of residence where applicable. This is based largely upon feedback that the U.S. Fish and Wildlife Service received from the falconry community during the development of the Environmental Assessment for the take of Peregrine Falcons in 2005. Had maximization of trapping success been the overwhelming preference at that time, then the passage take permits would have most likely been allocated to Gulf of Mexico and South Atlantic coastal states.

### Background:

Since calendar year 2009, a limited number of permits have been available for the trapping of juvenile (first-year) passage Peregrine Falcons for falconry purposes east of the 100<sup>th</sup> Meridian. During calendar year 2008, the final Environmental Assessment for the take of Peregrine Falcons was issued. In the EA, the agreed upon level of passage take was set at 36 birds to ensure that the harvest did not exceed 1% of the estimated, average annual production of American Peregrine Falcon chicks east of the 100<sup>th</sup> Meridian. At that time, as is the case today, there was limited information available to determine the migration pathways for Peregrine Falcons through the central and eastern United States. Existing banding data show band return records scattered throughout the region and apparent concentrations of falcons in coastal states; however, the committee reviewed the banding data and agreed that band return data could be biased by the non-random location of banding stations.

With limited biological information available on which to base their decision, representatives from the Nongame Technical Committees for the Central, Mississippi and Atlantic Flyways provisionally agreed in 2008 to divide the 36 available passage take permits equally among the three Flyways (12:12:12) with a temporary transfer of 6 from the Mississippi Flyway to the Atlantic Flyway for 2009. In 2010 there was not a consensus of the flyways on the allocation and the result was a Service Regulations Committee decision to allocate 12 to each of the flyways.

During the past two years, several concerns have been raised about the equitability of the 12:12:12 division of permits. The three flyways are approximately equal in their geographic size, but differ in the

number of member states and their human population density, which is likely to correlate to the number of falconers in each flyway. The root cause of this issue is the extremely limited number of passage take permits that are available. As a result of concerns raised by the Canadian Wildlife Service and some northern Atlantic Flyway states about the potential take of locally hatched Peregrine Falcons, the final Environmental Assessment for the passage take of Peregrine Falcons opted for a very conservative harvest level of 1% of the estimated average production of fledged birds. At the current time, this provides 36 passage take permits for the eastern United States, an area that encompasses 37 states. This scenario has set the stage for an intense competition between flyways and states for these permits, and this competition is unlikely to be reduced until the number of take permits is increased to a larger percentage of the average annual production of falcon fledglings.

### **Constraints and Considerations of the Committee:**

The Peregrine Falcon ad hoc Committee was faced with the following constraints as it worked toward an equitable distribution system for the limited number of passage take permits.

1) As a result of concerns by the Canadian Fish and Wildlife Service and some states, it is unlikely that the U.S. Fish and Wildlife Service will increase the number of passage take permits beyond 36 permits per year in the near future.

2) The passage take of Peregrine Falcons is restricted to first-year birds. The mortality rate of young-of-the-year raptors is typically high, therefore, restricting harvest to passage first-year birds minimizes the impact of trapping on the overall Peregrine Falcon population. While there is a biological justification for increasing the number of passage take permits to as many as 180 permits (5% of the estimated average annually production of fledglings) other considerations preclude such at the current time.

3) Very few data are available to determine the flight paths of migratory Peregrine Falcons or to determine how many Peregrine Falcons pass through the Central, Mississippi and Atlantic Flyways. The primary source of existing data for the movement of migratory Peregrine Falcons comes from U.S., Canadian and Danish banding records. We examined the data that are available, but these have several important limitations: 1) only a small number of Peregrine Falcons have been banded and recapture data exist for very few of these birds; 2) the geographic distribution of banded Peregrine Falcons is neither uniform nor random, and we don't know whether it is representative of the entire population that passes through the central and eastern United States; and 3) Peregrine Falcon recapture data may be biased toward coastal locations where raptor banding stations exist and not representative of their true migratory dispersion.

4) The interest within the falconry community for the opportunity to trap a passage Peregrine Falcon is much higher than the number of permits.

5) Regardless of method by which passage take permits are allocated to the states east of the 100th meridian, falconers in all eastern states should have the opportunity to apply for a percentage of the 41 nestling permits and 75 post-fledgling permits available annually west of the 100th meridian.

6) As more states modify their falconry regulations to allow the trapping/harvest of passage Peregrine Falcons, the competition between states for permits will increase and the more difficult it will be for any state to provide trapping opportunities to non-resident falconers, particularly for states that have high trapping success.

7) Based upon feedback from falconers and wildlife resource biologists in the states east of the 100th Meridian, the ad hoc Committee focused on allocation methods that would maximize the opportunities for the greatest number of falconers to trap passage Peregrine Falcons within their state of residence even if those methods might not maximize the trapping success rate.

8) The representatives from all three flyways were willing to consider permit allocation options that changed the current 12:12:12 distribution of permits among the flyways, but some flyway representatives were reluctant to make large shifts (> 30%) from the current ratio. Part of this concern was to distribute the take of passage birds somewhat evenly across the eastern migratory range of the Peregrine Falcon.

### **Alternative Methods for Allocation**

With these considerations in mind, the Peregrine Falcon ad hoc Committee looked at four alternative methods for allocating the 36 available permits annually between the Central, Mississippi and Atlantic Flyways and their member states. There is no perfect allocation alternative and each of the four alternatives presented here represent a compromise of some type. The recommended alternative proposed by the Peregrine Falcon ad hoc Committee is Alternative D, but we want to present three other alternatives to the Flyway Councils for discussion and comparison purposes.

#### **Alternative A (Current)**

A 12:12:12 ratio of passage take permits between the three flyways.

The overriding concern with this scenario stems from the fact that there are unequal numbers of states within each flyway and there are unequal numbers of states that have modified their falconry regulations to allow for the passage take of young Peregrine Falcons. The Central Flyway contains six states in the affected area and two of these currently allow for passage take. The Mississippi Flyway contains 14 states in the affected area and seven of these currently allow passage take. The Atlantic Flyway contains 17 states in the affected area and seven (with perhaps 8 by 2011) of these currently allow passage take. In this scenario there is a greater level of competition for permits between states that reduces the opportunities for falconers to attempt to trap passage birds within their home states.

#### **Alternative B**

Divide the permits equally among the states that allow for passage take of Peregrine Falcons. This alternative assigns permits directly to specific states without involvement of each Flyway's Non-game Bird Technical Section

In this scenario, the 36 permits would be divided by the number of participating states (states that have modified their falconry regulations to allow for passage take). In the event that the 36 permits could not be divided evenly, a lottery would be conducted to distribute the remaining permits among the states. In the 2011 falconry season, we anticipate that 17 states will participate in the passage trapping of Peregrine Falcons. Each state would receive two permits and a lottery would be held to allocate the remaining two permits. It is likely that only states that have successfully filled at least 50% of their previous permits would be eligible to be included in the lottery to increase the likelihood that the permits would go to states where falconers would be most likely to successfully trap a falcon.

The primary concern with allocation alternative B is that it treats all states as if they were equal in size, population and the number of licensed falconers. It would allocate the same number of permits to states with large populations such as Texas and Florida as it would to states with small populations like Oklahoma and Arkansas.

### **Additional Considerations:**

For now, the number of passage take permits is likely to remain steady at 36 permits as a result of the concerns mentioned earlier in this report. The limited number of permits contributes to the contentiousness of the allocation. If this is a concern for the Flyway Councils, then all of the Councils should consider both the positive and potential negative affects of increasing the number of permits. Increasing the number of permits from 1% of the average annual production (36 birds) to 2% (72) or 3% (108) is biologically justified at the population scale, but should be further explored in the context of the international flyway system.

Another method to consider is changing the functional "lifespan" of a permit from one year to two years by expanding the timeframe through which each permit is measured. Instead of 36 permits per year, the permit timeframe could be shifted to 72 permits per two year cycle. The total number of permits would not change and the total number of Peregrine Falcons that could be potentially harvested would not change, but the window of time through which we look at the permits would double. For the past two years, approximately 35% - 40% of the passage take permits have gone unfilled each year (although that might change as more falconers attempt to trap and their trapping techniques improve). If we look at permits on a two-year cycle, then any unfilled permits in the first year, could be "recaptured and reallocated" one time in the following year. If 10 to 14 permits were not filled in the first year, the flyways could take these unfilled permits and redistribute them on a one-time basis the following year. Under this scenario, it would be possible for more than 36 birds to be taken in one year, but the level of take would never exceed 72 birds in a two-year cycle because the additional birds that might be trapped in the second year would be offset by the unfilled permits in the first year. This option takes into account the normal, annual, weather-related variation that exists in the success rate at which Peregrine Falcons can be trapped. For example, it appears that trapping success was lower this year in the interior states as a result of a regional fall drought that reduced the numbers of shorebirds that lingered inland during their fall migration.