

Application to Register an Operation that Breeds Appendix-I Animal Species for Commercial Purposes: peregrine falcon (*Falco peregrinus*)

1. Name and address of the owner and manager of the captive breeding operation:

David Knutson
7411 S. Grove Rd.
Spokane, Washington 99224

2. Date of establishment: 1997

3. Species bred: peregrine falcon (*Falco peregrinus*)

4. Description of parental breeding stock: All peregrine parental stock was bred in captivity in the United States between 1996 and 2007, with the exception of one male and one female peregrine imported into the United States from Canada in 2003 and 2004. The list of parental breeding stock is attached (Attachment 1). The operation maintains 14 founders (7.7). All parental stock was imported, purchased, transferred, or bred by the applicant. Each parent has a closed U.S. Fish and Wildlife Service (USFWS) leg band, or a Canadian leg band for the imported birds.

5. Range State evidence that parental stock was obtained in accordance with the relevant national laws: The range of the peregrine falcon extends into the United States. *Falco peregrinus anatum* ranges from Canada to northern Mexico. *Falco peregrinus pealei* is found along the coastal Pacific Northwest from Washington to western Alaska (White et al. 2002).

The applicant has been licensed by the USFWS as a breeder of peregrine falcons, gyrfalcons, and hybrids since 1997 (license number: MB834663-0), as well as being licensed as a master falconer (license number: MB695833-0). With the exception of a male and a female peregrine imported from Canada (specimen numbers CW011535 and CX011252), the peregrine parental stock was acquired from other USFWS-licensed raptor breeders/falconers in the United States. All parental specimens are captive bred in the U.S. or Canada. The applicant is compliant with the Migratory Bird Treaty Act (MBTA) and all other State and Federal Government regulations. The applicant also provided copies of the Migratory Bird Acquisition and Disposition Reports (USFWS Form 3-186A), which indicates legal acquisition for each specimen, as well as USFWS raptor propagation annual reports. Any specimen covered under a valid falconry permit can be transferred to a valid propagation permit at any time by submitting Form 3-186A to the appropriate USFWS Migratory Bird Permit Office, documenting such a transfer. Copies of Form 3-186A, as well as breeder's statements are included in this application.

6. Criteria for operations located in non-range States: Not applicable.

7. Current stock held in addition to parental breeding stock:

All the birds listed in Attachment 1 are breeders or potential breeders. No offspring are being held for non-breeding purposes.

8. Information on the percentage of mortalities: There have been four mortalities in the past 10 years. Two adults died from trauma due to injuries resulting from an unusual fight that occurred between this pair of peregrines, and two died from old age. Annual post-hatch mortality is less than 10%.

9. Documentation that the species has been bred to second-generation offspring (F2) at the facility and a description of the method used: In the United States, wild peregrine falcons have been prohibited from collection since 1972. All of the breeding stock peregrines in the facility were acquired as at least F1 as indicated by the USFWS acquisition forms provided with the application. Between 2003 and 2008, the applicant produced 37 peregrine chicks. For the 2008 breeding season (Attachment 2), twelve specimens bred at the facility, and six specimens successfully produced chicks. There were two F1 or beyond specimens (RW095979 and RW095981), that successfully produced two of these chicks, marking the first second generation produced at the facility. Breeding techniques are methods that have been commonly and

successfully used by falcon breeders throughout the world. Breeding pairs copulate naturally, although some birds are artificially inseminated. The techniques used are in compliance with U.S. regulations (U.S. Code of Federal Regulations, Chapter 50, Part 21). Mr. Knutson has been a U.S. licensed falcon propagator since 1997 and has been very successful with using these standard techniques.

10. If the operation has only bred the species to the first generation, documentation showing that the husbandry methods used are the same as, or similar to, those that have resulted in second-generation offspring elsewhere: Not applicable.

11. Past, current, and expected annual production of offspring: In 2008, 4 offspring were produced and in 2007, 7 offspring were produced. Ten chicks were produced in 2006 and 10 in 2005. Production was 3 chicks for both 2004 and 2003. The applicant expects to produce 12 to 20 offspring per year as the parental stock matures. An average of 3 females produces offspring annually.

There have been no unusual fluctuations in production through the years at this facility.

12. Anticipated need for, and source of, additional specimens to augment breeding stock to avoid deleterious inbreeding: This program does not currently need to broaden the peregrine falcon gene pool. If birds are needed to avoid deleterious inbreeding in the future, the applicant may trade or purchase other captive-bred birds or semen. All imported specimens will come from CITES-registered breeding operations. Breeding records are maintained to ensure out crossing of related birds.

13. Type of product exported: Live birds

14. Description of marking methods: Each specimen is banded with a seamless aluminum numbered leg band issued by USFWS in accordance with the MBTA. Leg band numbers are unique for each bird. This information is recorded for parents and offspring to facilitate husbandry decisions.

15. Description of inspection and monitoring procedures to be used by the CITES Management Authority: The applicant will apply to the U.S. CITES Management Authority for all export permits for progeny produced at the facility. He will also submit an annual report listing the total number of birds at the facility, number of offspring produced, mortalities, and other acquisition or dispositions of the birds. This will allow the U.S. Management Authority to monitor activities in the breeding facility. In addition, the applicant may receive unannounced visits from USFWS personnel (e.g., Division of Law Enforcement, Division of Management Authority, Division of Scientific Authority, Office of Migratory Birds) who will report their findings to the CITES Management Authority.

16. Description of housing facilities: The breeding facility is a steel building with a total of 12 breeding rooms. Six rooms are 8 X 20 X 14 ft. high and six rooms are 8 X 16 X 14 ft. high. There is one weathering room for holding immature breeding stock (12 X 16 X 14 ft. high). All doors to breeding pens are locked, monitored, and repaired as needed by the applicant. The falcon facility is designed and constructed to prevent escape. All falcon rooms are locked as is the indoor access hallway. In the event of a bird escaping from a room, it would be trapped in the interior hallway. Metal security mesh is secured over each breeding room to allow fresh air to circulate as well as provide the opportunity for birds to receive sunlight. All birds are free flighted. The facility also contains an incubator laboratory with three incubators, a hatcher, brooder, and an office. The facilities food supply is coturnix quail with scheduled deliveries of 200 quail every two weeks during the year, and 200 quail every week during the months where chicks are being reared.

17. Strategies used by the breeding operation to contribute towards the conservation status of wild populations of this species: The applicant speaks about falcon biology and conservation at schools and sportsmen's groups. He also provides technical assistance to Washington State University regarding raptor husbandry, rehabilitation, and release.

18. Assurance that the operation is humane: All falcons are kept in rooms large enough to allow them to fly short distances. The facilities are well ventilated. All birds have access to natural sunlight and water for bathing and drinking. There is little human interaction with paired except for routine maintenance and veterinary procedures. Veterinary care is provided by a veterinarian trained in raptor medicine and from experts at Washington State University.

References

USFWS (United States Fish and Wildlife Service). 1999. Endangered and threatened wildlife and plants; final rule to remove the American peregrine falcon from the Federal list of endangered and threatened wildlife, and to remove the similarity of appearance provision for free-flying peregrines in the conterminous United States; final rule. *Federal Register* 64(164):46542-46558.

White, C. M., N. J. Clum, T. J. Cade, and W. Grainger Hunt. 2002. Peregrine falcon. The Birds of North America No. 660 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Attachment 1. Current Parental Stock

Falco peregrinus

USFWS Band Number	Hatch Year	Sex
RW086315	1996	M
CX011252 (Canadian band)	1998	F
RW089955	2000	F
RV082785	2000	M
RW091649	2001	F
RW086923	1997	M
RV085878	2005	M
RW092282	2004	F
RW092720	2004	M
CW011535 (Canadian band)	2003	M
RW089951	2000	F
RW095981	2006	F
RW095979	2006	M
RW095987	2007	F

Attachment 2. Breeding Pedigrees for 2008 season and documented breeding to the F2 generation

Pair # 1

Female: CX011252

Male: RW086315

Laid 2 eggs.....raised 0 beyond two weeks

Pair # 2

Female: RW089955

Male: RW086923

Laid 4 eggs.....raised 1 beyond two weeks (RV087327 male)

Pair # 3

Female: RW091649

Male: RV082785

Laid 8 eggs.....raised 1 beyond two weeks (RV087329 male)

Pair # 4

Female: RW092282

Male: RW092720

Laid 3 eggs.....raised 0 beyond two weeks

Pair # 5

Female: RW095981

Male: RW095979

Laid 4 eggs.....raised 2 beyond two weeks (RW097477 female and RW097475 female, F-2)

Pair # 6

Female: RW089951

Male: RV085878

Laid 3 eggs.....raised 0 beyond two weeks