Application to Register an Operation Breeding Appendix-I Animal Species for Commercial Purposes: Gyrfalcon (*Falco rusticolus*) and peregrine-gyrfalcon hybrids (*F. peregrinus x F. rusticolus*)

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

Pacific Northwest Falcons
Danny Ertsgaard and Jorgene Eastman Ertsgaard
9999 SE France Lane (physical address)
P.O. Box 797 (mailing address)
Prinesville, Oregon 97754

- 2. Date of establishment: 1986
- 3. **Species bred:** Gyrfalcon (*Falco rusticolus*), peregrine-gyrfalcon hybrids (*F. peregrinus x F. rusticolus*).
- 4. **Description of parental breeding stock:** With the exception of one bird, all parental stock was bred in captivity in the United States between 1987 and 2006. One bird was legally collected from the wild in the State of Alaska in 1984 (bird is now deceased). The list of the original parental breeding stock, as well as subsequent birds bred at Pacific Northwest Falcons from the original parental stock and which are or will be used as breeding stock, is attached (Attachment 1). The parental breeding stock consists of 35.32 *Falco rusticolus*, and 0.8 *F. peregrinus*, and 2.0 *F. peregrinus* x *F. rusticolus* hybrids. All parental stock was purchased, transferred, or bred by the applicant. Each parent has a closed U.S. Fish and Wildlife Service (USFWS) leg band in accordance with the U.S. Migratory Bird Treaty Act (MBTA). Danny Ertsgaard has been licensed by the USFWS as a breeder of raptors since 1985 and Jorgene Eastman Ertsgaard since 1998. The applicant provided copies of the Migratory Bird Acquisition and Disposition Reports (USFWS Form 3-186A), which indicate legal acquisition of each specimen.
- 5. Range State evidence that parental stock was obtained in accordance with the relevant national laws: The ranges of the peregrine and gyrfalcon extend 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 gyrfalcon (Falco rusticolus) is circumpolar in distribution.

The applicants have been licensed by the USFWS as a breeder of raptors since 1985 and 1998. The parental stock was acquired from other USFWS-licensed raptor breeders in the United States. With the exception of one wild-collected *F. rusticolus*, all parental specimens are captive bred in the United States. The applicant is compliant with the Migratory Bird Treaty Act (MBTA) and all other State and Federal Government regulations. The applicant also provided a 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.

- 6. Criteria for operations located in non-range States: Not applicable.
- 7. **Current stock held in addition to parental breeding stock:** With the exception of four *F. rusticolus*, all the birds listed in Attachment 1 are breeders or potential breeders. Three birds (RX080163, RO004548, and RX0880453) are birds that were original parental stock, but have subsequently died. The fourth bird (RX081225) was part of the breeding stock, but was subsequently moved out of this breeding program. This bird is not considered part of the current breeding stock.
- 8. **Information on the percentage of mortalities:** Mortalities were very few, limited to less than 2.5% (1.75% male, 0.75% female) of the operation over the last 10 years. Mortalities were due to a variety of causes (e.g., accidents, disease, and old age) and were spread across all age groups.
- 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. Wild gyrfalcons can be collected, but only with specific authorization from the U.S. Fish and Wildlife Service and the appropriate State agency in the State where the bird would be collected. With the exception of the single wild-collected gyrfalcon, all of the breeding stock peregrines and gyrfalcons in the facility were acquired as at least F1 as indicated by the USFWS acquisition forms provided with the application.

All offspring produced in the last 20 years have been F2 or greater (Attachment 2 consists of a series of pedigree charts of birds breed by the applicant). 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 (Code of Federal Regulations, Chapter 50, Part 21). Mr. and Mrs. Ertsgaard have been U.S. licensed falcon propagators for many years and have 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:** The applicants operation has produced 217 gyrfalcons and 133 gyr-peregrine hybrid offspring between 1998 and 2007.

Year	Producing Females	Offspring Raised
1998	3	4
1999	5	8
2000	9	26
2001	14	31
2002	10	37
2003	12	49
2004	19	60
2005	23	83
2006	19	82
2007	20	86

The applicant expects to produce 47 falcons in 2008 (30 gyrfalcons and 17 gyrfalcon x peregrine hybrids).

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

- 12. Anticipated need for, and source of, additional specimens to augment breeding stock to avoid deleterious inbreeding: This program has made great efforts to purchase a widely diverse genetic pool of unrelated falcons to avoid any inbreeding. If birds are needed to avoid deleterious inbreeding in the future, the applicant may trade or purchase other captive-bred birds or semen. Breeding records are maintained to ensure outcrossing of related birds. As a result, fecundity remains high and there have been no obvious genetic abnormalities.
- 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. 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 operation contains 42 imprint chambers which are approximately 10' by 10', with an open large window out and an open sky light. There

are also 23 natural breeding chambers approximately 10' by 18' long with open sky lights. Two additional breeding buildings, a 44' by 100' natural breeding barn with 20 chambers, and a 28' by 90' imprint barn with 18 chambers is under construction. All doors to breeding pens are locked, monitored, and repaired as needed by the applicant. The breeding facility is designed and constructed to prevent escape. In the event of a bird escaping from a room, it would be trapped in the interior hallway. The facilities are also well ventilated with insect screening to prevent disease transmission by insects.

The facility has seven China Prairie incubators, a Contaq 8 Brinsea incubator, a Contaq 3 Brinsea incubator, six Lyon roll-X incubators, and a GQF Sportsman incubator. A total egg capacity is in the hundreds, far exceeding the anticipated egg production level for the facility.

Food production is primarily through Boyds Bird Company, Pullman, Washington. This food source has proven to be a consistent and reliable source for food and is utilized by many falcon breeders in the United States.

- 17. Strategies used by the breeding operation to contribute towards the conservation status of wild populations of this species: The applicant has sold falcons all over the world for the sport of falconry, breeding, and education. The applicant has taken and shown many falcons at local schools and county functions to further educate people about the survival and conservation of these species. The applicant has passed on incubation techniques regarding breeding of gyrfalcons in warm and humid climates to other breeders all over the world and will continue to share knowledge in all aspects of captive breeding to ensure a continued sustained population of these species. He is a member of the North American Raptor Breeders Association and the National American Falconers Association, both of which provide raptor education to the public and work towards protection of all native raptor species. This breeding program will also reduce reliance on the wild population for falconry and breeding purposes. Therefore, the operation will make a meaningful contribution according to the conservation needs of these species.
- 18. Assurance that the operation is humane: All falcons are kept in rooms large enough to allow them to fly short distances. The facility also includes enough space for all fledglings to learn flight skills and achieve good physical condition. The facilities are well ventilated and contain a sprinkler system. All birds have access to natural sunlight and water for bathing and drinking. There is little human interaction with paired falcons except for routine maintenance and veterinary procedures. A veterinary facility and/or raptor rehabilitation facilities are available nearby. Therefore, the operation will be conducted in a humane manner.

## 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.