Chickens and turkeys are popular livestock choices for rural, suburban and even urban Alaskans. However, a variety of other poultry species, breeds and varieties, including waterfowl and game birds, are also available. Geese, ducks and game birds can be raised for healthy meat, eggs and other products, and they come in an array of sizes, shapes and colors to fit most any project or situation. They can be raised in much smaller spaces and at less cost than most other livestock and they may reproduce more often for a steady supply of protein. These birds can provide a colorful addition to your yard or farmstead, or be part of your recreational, creative or entrepreneurial endeavors.

**COMMON CONSIDERATIONS**

Be sure to consider all aspects of animal keeping when making any commitment. The Cooperative Extension Service publication *Factors to Consider Before Establishing an Alaska Livestock Enterprise*, LPM-00743, provides helpful information applicable to any potential livestock owner. Space, time, economics, facilities and level of experience are some considerations that should be addressed. Specific to any poultry-raising endeavor is the need for adequate space for the type of birds you are interested in. Most birds prefer company, so plan on having two or more. A large flock of pheasants will require more space than a few button quail. If you live in a populated area, subdivision covenants or zoning may also be an issue. Even if there are no defined restrictions, poultry noise or odor can cause a problem with neighbors. The loud, raucous call of a peafowl in the early morning hours can make enemies of even devoted bird lovers.

How much time do you have to devote to your flock? Some species will be more labor intensive than others. Economics should also be considered. What can you afford? Costs may not be limited to the birds, feed and facilities. If you are planning to sell your birds or products, you should research available and potential markets and associated costs. What are your plans for processing birds raised for meat?

Availability can be an issue. Most common breeds and varieties, as well as many less common types of poultry, are available in Alaska. Less common breeds may need to be shipped up from breeders or other sources in the Lower 48, adding to your costs. Obtain your birds from established, reputable sources, whether within or outside of the state. Shipping eggs or chicks into the state can be expensive and is highly dependent on weather. Some breeds are better suited to northern climates while other breeds may have specific needs. Carefully researching prospective birds will help you make knowledgeable decisions on selection, management and health considerations. Starting with hatchlings is usually easier and more reliable than incubating eggs. Mature birds may also be a way to start, but they can be more expensive. Check with local feed stores, breeders or swap meets to see what may be available or for ordering information. A fair or other livestock-related event may also be a good point of contact for poultry breeders.

Maintaining a safe, healthy flock keeps expenses down and profits up. Because poultry is attractive to a wide variety of wild and domestic predators, secure fencing is a must. Even your family pet may be interested, particularly with young birds. Depending on your location, consider using electrical fencing to deter bears.

Poultry are susceptible to a number of diseases and illnesses, so prevention is the best approach. Maintain good biosecurity practices such as keeping cages, tools and shoes clean and isolating visitors. Choose alert, healthy-appearing birds to begin with and watch your flock for any signs of illness, injury or other concerns. New birds should be kept separate from the established flock.
for 30 days. Proper control of temperature, humidity, drafts, ventilation and lighting, as well as clean water, adequate space and exercise, quality food, dry bedding and cleanliness, will reduce potential health-related problems. Medications may be added to the drinking water to further reduce disease or parasites. Always wash and disinfect your hands and clothing often for further prevention. Have a plan for what you will do when illness or injury does occur and a plan for safe disposal of dead birds. Disposal or use of soiled bedding and manure must also be considered. Properly composted and stored poultry manure can be highly beneficial and possibly profitable.

Feed can be a significant expense; it should be properly stored in a cool, dry place in rodent-proof containers. Check the date of manufacture, usually printed on the feed bag tag, to ensure freshness. Feed stored beyond four weeks loses quality and can become rancid. Fresh, liquid water is essential year-round; depending on where you are located and on housing type, the purchase of heated containers may be a worthwhile investment.

Keeping records on your poultry can be important, even if your birds are just kept as pets. Individual poultry may be identified by using various-sized leg bands. If you are raising poultry as a business, you will need detailed information on pedigrees, health records, growth rates, marketing and sales.

**GEESE**

With over 60 domestic breeds available, geese have long been a farm favorite as a source of meat and eggs, an alarm system, weed and insect control, and a provider of feathers. More common breeds in Alaska are Embden, Toulouse, Buff, Pilgrim, Chinese and African. The Embden, Toulouse and African breeds mature to heavier weights and are more commonly raised for meat. Canada and other wild geese may not be kept without a federal permit. Geese are happiest with year-round access to water for drinking and, ideally, swimming, which is not easily accomplished in Alaska. A shelter is also needed, with a clean, dry, gravel floor and bedding such as straw or wood shavings. A minimum of 10 square feet per adult bird is suggested. Since geese produce wet droppings, bedding should be changed often. If the shelter is not enclosed, a fence as protection from predators is recommended, particularly for goslings. Although adult geese seldom fly, fencing should be high enough to discourage predators and may be wire mesh, wood, chain link or similar material.

Most people start with newly hatched goslings, which need access to a heat lamp or other heat source. The temperature should be kept at 90°F for the first week, then reduced by 5 degrees per week until it is similar to outdoor temperatures. Goslings up to four weeks of age may be fed a commercially formulated crumble starter feed, followed by pelleted feed through maturity. A covered hanging tube feeder or sturdy nontipping feeder will reduce waste and mess. Geese enjoy vegetables and greens and benefit from access to a pasture or opportunities to forage for wild plants and insects; however, supplemental feed is still needed. Geese can be effective for weed, grass and pest control for certain crops, but some herbicides and insecticides are harmful to geese, so be sure to find out if any have been used on an area before geese are allowed to graze on it. Geese will also need access to grit for digestion and additional calcium or oyster shell grit during periods of egg production. Fresh water, also in sturdy containers, should also always be available. A heated bucket is helpful for winter use.

Geese may become aggressive, particularly during the breeding or nesting season. Stand your ground if at all possible to assert your dominance and take care to keep an even male-to-female ratio to reduce problems. Geese usually mate in pairs but one gander (male) may be kept for five or six females. Identifying sex in geese can be challenging; the gander is usually larger and coarser, with a shriller alarm honk. A goose may need to be closely examined to determine gender. This can be done by carefully yet firmly holding the bird on its back and palpating the vent area to reveal the genitals.

Most geese start to lay eggs at about a year of age and are seasonal (spring/early summer) breeders. Provide a higher protein feed (16–20%) and a covered nest box area about 2 feet square with nesting material such as straw or wood shavings for each female goose. Alternatively, a goose may choose her own secluded nesting area. The goose will lay an egg every day or two until she has a clutch of six to 12 eggs. If fertilized, the eggs should begin hatching in about 30 days.

**DUCKS**

Like geese, ducks are commonly raised for meat and rich eggs. The Khaki Campbell and Runner breeds of duck are known for their egg-laying abilities, while heavier breeds such as the Pekin, Rouen and Muscovy are better suited for meat. Many other breeds are also popular as pets, show animals and for insect control. Federal permits are required to keep wild ducks. Husbandry is similar to that for geese; however, ducks are more likely to fly, so a taller, covered fence is needed or the wing bones or feathers should be clipped. The fenc
ing mesh should be closely spaced to prevent ducklings from escape. Nutrition needs are similar to those of other poultry, but ducks will need supplemental feed if they are par- tured or allowed to forage.

Ducklings will need access to a heat lamp until four weeks of age. Ducklings should have access to quality waterfowl grower feed, grit and fresh water at all times. Ducks may be ready for butchering at eight weeks and may begin laying white or greenish colored eggs at six months of age. Nest boxes approximately 12 inches square may be provided for every three to five hens. If ducks are raised for breeding, a ratio of one drake (male) per five or six ducks is sufficient. Drakes can usually be identified by their brighter plumage, but for breeds in which the males and females have similar-colored plumage, drakes can usually be identified by the curled feathers on their tails and a softer “quack.” A duck will lay 12–18 eggs, with a 28-day incubation period before hatching.

**SWANS**

Usually raised for their aesthetic quality rather than for meat, swans can be expensive and difficult to find. Mute and Black Swans are more common. Similar in care and feeding to geese, these large birds mate for life and are best kept in pairs. They prefer access to water year-round and need adequate shelter and fenced protection from predators. Swans can be territorial and aggressive. Wild native swans cannot be kept without federal permits.

**GUINEA FOWL**

Guinea fowl are a longtime family farm favorite, providing a reliable alarm system, insect control, eggs and lean, nutritious meat. Although they are originally from a warm climate, they adapt well to colder environments and are relatively low maintenance. They are more active than other poultry and less tame. They begin to fly at an early age and require a tall, covered pen if they are to be confined. Often they are free ranged and will roost in trees. Confining them at night may reduce loss to predators. When confined, provide a minimum of 2 to 3 square feet per bird and ample clean, dry bedding such as straw or wood shavings. Hanging or raised waterers and feeders will help keep the pen dry.

Guinea fowl chicks are called keets and need a high-protein (24–26%) starter ration before switching to a game bird or chicken layer feed (usually 16% protein) after eight weeks of age. If allowed, they also forage for seeds and insects. Clean water is a must, with keets preferring warm water. Guinea fowl breed in the spring and eggs hatch in approximately 28 days. If used for food, two guinea fowl eggs are the equivalent size of one chicken egg. Guinea fowl can be difficult to sex and can be noisy, with females having more varied calls.

**GAME BIRDS (QUAIL, PARTRIDGES, PHEASANTS, PEAFOWL)**

From tiny quail to the elegant peacock, game birds offer a wide variety of interesting species and opportunities. These birds may be raised for meat, eggs, feathers, taxidermy, dog training, hunting, exhibition and breeding stock. Similar to guinea fowl, most game birds are more active, less tame and less adaptable to close confinement. However, if allowed to range free, most are unlikely to remain in your yard and could be subject to state or federal exotic species regulations.

Quail are the smallest of the common game birds. The imported Japanese Coturnix quail are commonly raised for both egg and meat production. These birds mature at six weeks of age and may lay 250 to 300 multicolored eggs per year. Meat birds may be slaughtered at nine weeks of age. Quail native to the United States, such as the bobwhite and some Western breeds, may also be raised.

Partridge breeds include the Chukar and Hungarian and will likely also need to be imported from the Lower 48. As with any other species of poultry, always make sure the birds are acquired from a reliable source. Larger than quail, these birds are hunted in many parts of the country but may also be raised in captivity.

Pheasants are beautiful birds with colorful plumage and delicious meat. The most common Chinese pheasant was imported to the United States in the mid 1800s and has been successfully established as a wild game bird in most states. Commercial pheasant farms raise the birds for meat, breeding stock and release. Other pheasant breeds, such as the Golden, Silver, Lady Amherst and Reeves, are more commonly raised for exhibition.

Peafowl are well known for their vibrant colors and the long, elegant tail feathers of the peacocks. Their meat was often served to kings. Peafowl are effective alarm birds with a loud call. Originally from warmer climates, peacocks need protected indoor space large enough to accommodate their tail feathers when roosting and protect them from predators.

Game birds are usually obtained by incubating eggs or purchasing chicks from a reliable source. As with other poultry, chicks will need to be brooded under a heat source: start at 95°F, then decrease by five degrees weekly until room or outdoor temperature. Adequate light (12–16 hours per day) and ventilation are important.

Most game birds are strong fliers at an early age, so a covered pen is recommended. This will also reduce predation from owls or hawks. A pen with a minimum of 3 square feet per adult quail and up to 10 square feet per adult pheasant with 1- or 2-inch wire mesh or poultry netting, 6 feet high, is suggested. Burying the bottom 6 to 12 inches of fencing may deter weasels and dogs. Wire or plastic mesh may be used overhead. A cover crop of grains or legumes to provide shade, shelter and feed is suggested for game bird pens. Game birds also need continuous access to grit and clean, fresh water, preferably located off the ground to prevent mud. Medicine and vitamins may be added to the water.
Game birds may be fed on commercial game bird or poultry feeds; use higher protein (24–28%) starter feeds for chicks under six weeks of age, 14–15% for market birds and slightly higher for breeding stock.

PIGEONS
In many parts of the world, pigeons have been raised for food for centuries. Young pigeon, known as squab, is a gourmet meat. Although large farms exist in the U.S., the business of raising pigeons for meat has much room for growth. Pigeons are fairly quiet, hardy and require less space and feed than other poultry. With almost 200 breeds and varieties available, pigeons are also raised for show, racing and homing contests.

Housing for pigeons, referred to as a “loft,” should include an enclosed area and a flight cage. The loft size depends on the number of birds, but an average size of 4 feet by 8 feet by 7 feet high should suffice, with a separate smaller but similar space for breeding or young birds. A safely hung heat light may be needed for extremely cold nights. The loft should be ventilated, with the floor raised off the ground to reduce moisture. Separate perching boxes approximately 10×12 inches will reduce fighting. Mated pairs should have access to nest boxes about 12×12×18 inches, with a 4-inch lip to reduce egg and nesting material loss. Hay, straw, wood chips and twigs may be used as nesting material.

Pigeons usually mate as lifelong pairs and the two eggs laid are incubated for about 18 days. They will nest year-round but extreme cold may freeze eggs and young birds. Both parents take turns brooding the eggs and feeding the young a regurgitated “pigeon milk” they produce. At four weeks of age, the squabs are full size and able to care for themselves and may be harvested for meat. Young birds may be banded for identification purposes.

Pigeons may be fed a commercial grain mix or pellets and should have access to grit and clean, fresh water at all times. Some people may develop allergies to a powdery down that pigeons produce.

OTHER CONSIDERATIONS
Although market or slaughter age varies, poultry should be dispatched humanely and processed in sanitary conditions. Meat should be properly stored or further processed. Fresh eggs for eating should be gathered daily, refrigerated and used promptly. See Extension publication Safe Egg Handling for Small Egg-Laying Flocks and Operations, LPM-00344, for more information. Feathers or down gathered for stuffing or craft use should be gently washed with mild liquid soap and dried thoroughly before use or storage.

Participating in local, state or even national poultry shows can be a fun and informative way to learn about and enjoy your birds. Check with local poultry clubs or fairs for more information about shows in your area and how to prepare your birds for showing. Poultry raised for show and other competitions may require a more specific feeding, handling and grooming regimen.

SUMMARY
Whether for meat, eggs, down, feathers, pets or show, geese, ducks, guinea fowl, game birds or pigeons can be raised as a viable hobby or business in most areas of Alaska. They are fairly simple to care for, fit into most any housing situation and are an affordable, nutritious protein alternative to other domestic livestock. They can be colorful and enjoyable additions to your yard and diet.

RESOURCES
Wilson, Dave. “Poultry: A Guide to Anatomy and Selected Species.” Information Technology and Communications Services Instructional Materials at the University of Illinois, Urbana, IL. Available at http://www.aces.uiuc.edu/ITCS/IM.

UAF COOPERATIVE EXTENSION PUBLICATIONS
Factors to Consider Before Establishing an Alaska Livestock Enterprise, LPM-00743.
Safe Egg Handling for Small Egg-Laying Flocks and Operations, LPM-00344.

www.uaf.edu/ces or 1-877-520-5211

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