

Best practices for raising backyard hens in a wildlife corridor

Hens are pets with benefits. They provide eggs, garden fertilizer, pest control, and a safe and engaging connection to local food systems. They can turn food waste into human nutrition. In these ways they support local food security and food system resilience toward climate adaptation.

Two key considerations for hen keeping in the Elk Valley are cold, snowy winters and being located within a wildlife corridor. Responsible hen keeping in this area will always include providing humane, healthy living conditions year-round and properly managing all wildlife attractants. Attractants include feed, eggs and the hens themselves, along with household garbage, fruit tree yields and compost piles.

COOP DESIGN & PROTECTION



The Coop - The right coop has sufficient ventilation is appropriately sized, enables easy cleaning and egg collection and is adequately protected from predators. Ventilation is very important, as moisture build-up in the coop creates health problems, including respiratory disease and frostbite. Check bylaws for coop size and siting requirements.



The Right Run - A run is a large fenced area connected to the coop. Design for predator protection, ease of cleaning, filling feed/water, dust bath area and cover from precipitation, sun, and aerial predators. Fencing needs to be sturdy, tight and buried to prevent diggers accessing the run, hardware cloth should be buried 12-18 inches deep with a 3ft wide apron. Plan for electric fencing for larger predators.



Predator-Proof - vulnerable hens have many wild and domestic predators including cats, dogs, skunks, raccoons, hawks, foxes, coyotes, and bears. Choose a coop with a solid base and check it regularly, top to bottom, for holes or gaps. A safe coop is closed nightly with predator-proof latches, and enclosed with hardware cloth (not just chicken wire) over windows, roof gaps, and floor. Consider using an automatic door on a timer. Clean up food and other attractants nightly around the coop.



Install Electric Fencing - Perimeter electric fencing is a primary tool for responsibly raising hens in the Elk Valley. When correctly installed, it functions to deter predators by consistently delivering a painful, but not harmful, shock to animals that touch it. Refer to WildsafeBC (resource listed below) for detailed information on proper installation, design, voltage and maintenance requirements to effectively and consistently deter large predators, such as bears, with electric fencing.



Sourcing Litter - The bottom of the coop is covered with litter which can be sawdust, hay, straw or washed construction sand. Litter keeps your coop dry, controls smell from fresh droppings and facilitates cleaning. Pine shavings are absorbent, inexpensive and readily available. Sand and pine shavings tend to absorb more moisture and in the winter this can cause humidity, frostbite and respiratory concerns. Straw works well in the winter as it holds heat better because of its hollow structure.



Plan for Winter - Hens generally do well in winter provided they have a dry well-ventilated, draft-free, and warm shelter. Hens can get frostbite even at mild temperatures if the moisture content in the coops is too high. Birds consume more feed in the winter to stay warm. Ensure your run has a covered area for protection from snow. Consider investing in a heated waterer such as a heated dog water bowl. Build roosts out of 2x4's with the wide side facing up to allow the birds to cover their feet with their feathers when they roost in the evening.

CHICKEN CHARACTERISTICS, BEHAVIOUR & LIFE CYCLE



Choose The Right Breed - The breed impacts egg number and colour, cold hardiness and docility. Choose a breed with small combs/wattles to decrease risk of frostbite. Buy from a reputable source. Very few breeds can be sexed as chicks, even chicks sold as sexed may have been sexed incorrectly. Choose one of these or else you'll end up with roosters. At about 4 months of age, there may be some indications if you have a cockerel (male) or pullet (female). Roosters are not allowed in urban areas.



Enjoy Your Eggs - Hens usually start laying around 22 weeks of age. All breeds vary in their rate of lay, with most breeds laying an egg once every two days. Hens require ~15 hours of light a day to lay. Light can be added to a coop in the winter to continue summertime egg production rates but this will cause the hens to stop laying sooner and can impact how long they live. To keep eggs clean, provide hens with freshly laid straw in their nesting boxes and collect eggs regularly. When the day length becomes shorter hens will naturally decline in egg production. Hens also stop producing eggs during annual moulting when days get shorter and older feathers are replaced with new ones.



Lifecycle Plans - Hens can live 5 to 10 years. They are most productive during the first two years of their life. They lay fewer eggs as they get older and also stop laying in the winter due to low light. Consider what your end of life plans will be for older hens who are no longer laying. Euthanasia may be the most humane option for ill or injured birds if recovery is not likely or treatment not practical. Urban municipalities prohibit killing hens within city limits.



The Pecking Order - Flocks establish social hierarchies. Birds at the top of the pecking order will have the best of everything. Others must take their place as defined by where they are in the hierarchy. Overcrowding can exacerbate aggression and stress within a flock. If you are outside the city limits, it is recommended to have one rooster for every 8-19 hens as hens can, at times, become too aggressive if there is no rooster.

HEN CARE & HYGIENE



Feed - Good quality feed is essential to chicken health, as is a regular supply of grit, scratch and oyster shells. Each stage of development has a different feed. An average adult hen will consume about ¼ lb of feed per day. Bears and rodents love chicken feed so store it securely in a bear-proof area separate from the coop. Hens like to forage and will eat weeds, flowers, plants, insects and even mice.



Food Scraps - Food scraps can supplement the diet and can improve nutritional value of eggs. Chickens enjoy many vegetable scraps and peels that are usually composted or thrown away. Note, hens should not be fed: uncooked beans/rice, onion/garlic, citrus, moldy food, avocado, green or raw potatoes, green tomatoes or tomato leaves, rhubarb and chocolate. They cannot eat foods containing salt, sugar or fat.



Waste - Keeping coop clean and dry contributes to a healthy flock. Clean coop weekly or use deep litter method. Many people prefer to install a poop-deck under the roosts in the coop to make cleaning easier. Your coop can generate a lot of bedding and manure that can be a great addition to your garden compost. Good coop hygiene reduces unpleasant odours.



Prepare For Illness - Chickens do get sick. Chickens hide illness very well, so careful and frequent observation is required. Learn how disease spreads, what to look for, how to prevent illness, and how to treat the most common diseases and injuries. There are vaccines for day-old chicks to help develop immunity to some diseases. Segregate any sick birds immediately, have a sick bay ready (e.g. a dog crate). Very few vets will offer services for poultry, so be sure to prepare a poultry first aid kit.



Prevent Disease - Maintain a closed flock by quarantining new birds for at least 30 days prior to introducing them to your main flock. Always wash your hands before and after handling the birds and eggs. Prevent contamination of your flock's feed and water by wild birds and animals. Use proper cleanout and disinfection procedures to thoroughly and regularly clean the coop and all equipment. It is not advisable to borrow equipment from another flock, but if you must, ensure that it is cleaned and disinfected first.



Water - Fresh, clean water is vital. Hens consume twice as much water as they do feed. Waterers need to be cleaned often to prevent bacterial growth and kept free of debris.



Calculate The Costs - Costs include chicks, coop & run, electric fencing, feeder, waterer, feed, bedding, first aid kit, municipal licensing fees, heated water dish. Chicks are the cheapest to purchase although you need to purchase chick supplies and will wait 5-6 months before you collect eggs. Raising urban hens for eggs won't save you money, but in terms of nourishment, entertainment, and family-friendly learning the benefits are immense.



Schedule For Success - Chickens require daily, weekly, monthly and seasonal chores. Daily tasks include refreshing water, cleaning water bowls & containers, feeding, collecting eggs, observation and opening & closing the coop. Weekly tasks include disinfecting waters, inspecting the coop, managing the litter, and checking the dust bath. Monthly tasks include picking up supplies, refreshing nesting boxes, and cleaning the coop. Seasonal tasks include adjustments to weather, deep cleaning & sanitizing of the coop (2-3 times/year) and scrubbing e-fencing ground rod connections to remove corrosion.



Connect With Community - Connect with other people who raise and care for chickens, who can help problem solve and share the joys of raising hens. Have friends and family who can help you out when you want to go on vacation.

ADDITIONAL BACKYARD HEN RESOURCES

There are a multitude of resources available for learning the best practices of keeping backyard hens. When conducting your research, keep in mind the cold climate and wildlife considerations, unique to the Elk Valley.

the-chicken-chick.com
 rivercitychickens.org/resources
 fresheggdaily.blog
 raising-happy-chickens.com

Farm the Kootenays Facebook group
 raising-happy-chickens.com --> check out their first aid kit checklist for chickens
 afac.ab.ca --> check out their Hen Manual
 wildsafebc.com --> check out their Urban Chickens Bees and Electric Fencing

Storey's Guide To Raising Chickens by Gail Damerow
 A Kid's Guide to Keeping Chickens by Melissa Caughey



This document and the accompanying recorded webinar support Elk Valley residents to identify best practices for raising urban backyard hens in a cold climate, within an important wildlife corridor.

Developed by the Community Energy Association and Wildsight Elk Valley Branch, these resources were created to support one of the four recommendations in the 2021 Fernie Food Action Strategy.



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