HOW TO START A
CHICKEN COOP
IN YOUR BACKYARD

How to Start a Chicken Coop in Your Backyard

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Chapter 1: Plan Like a Pro — Permits, Site, Size, and Supplies

Get the planning right and the build will feel like a cheat code. This chapter gives you a zero-nonsense checklist and measurements so you can decide what to build today, apply for any permits if needed, buy the right stuff, and avoid late-night neighbor drama. No jargon. Just the exact steps Lane County residents need to get started.

Outcome: Clear site chosen, coop size decided, permit check done, materials and tools list in hand.

Step-by-step planning (do these now)

> **Check local rules (3 actions, 10–30 minutes):**
>> **Call your city planning office (Eugene, Springfield, Cottage Grove, or unincorporated Lane County) and ask: are backyard hens allowed, any limit on number, setbacks, and whether roosters are prohibited? Note the contact and any permit forms.**
>> **Check HOA rules if you have one. HOA often overrules county allowances.**
>> **If you live near wetlands, creeks, or in a mapped floodplain, avoid placing the coop there. Ask county planning for setback rules.**
> **Decide how many birds you want (quick guide):**
> **2–4 birds: hobby egg supply for 1–2 people.**
> **5–8 birds: steady supply for a family and sharing with neighbors.**
> **Use this for sizing: inside coop space = 4 square feet per bird. Covered run = 8–10 square feet per bird.**
> **Choose general location (10 minutes):**
> **Sunny morning light, afternoon shade, good drainage, near a water source but not under trees where droppings stain neighbor fences.**
> **Place coop on highest point in yard to avoid wet bedding in Lane County's rainy season.**
> **Keep it 5–10 feet from property line if neighbors are close; this helps reduce smell and noise complaints.**
> **Make a predator plan (15 minutes): list local threats and protections.**
> **Predators in Lane County: raccoons, coyotes, owls, hawks, neighborhood dogs. Raccoons are smart — use 1/2 inch hardware cloth and latches raccoons can't unscrew.**
> **Plan to bury hardware cloth 12 inches and add a 12–18 inch outward apron to defeat digging predators.**

Essential measurements for a 4-hen starter coop (build this if you want fast wins)

Footprint: 4 ft by 8 ft (inside floor) — gives space to roost and two nesting

boxes.

Roost: 8–12 inches of perch per bird. Perch height 2–4 ft above floor. Use rounded 2" diameter wooden dowels or branches.

Nesting boxes: two boxes, each 12" x 12" x 12"; mounted 18–24" off the floor. One box per 3–4 hens.

Ventilation: at least 1 sq ft of screened venting higher on the walls plus low vents for airflow. Screen it to keep bugs and predators out.

Materials checklist (buy local where possible)

Pressure-treated 4x4 posts (for base) and 2x4 framing lumber

Exterior plywood or T1-11 siding for walls

Roofing (corrugated metal or asphalt shingles)

1/2" galvanized hardware cloth (do not use chicken wire for predator protection)

Hinges, padlockable latches, carriage bolts

Plywood for nesting boxes and floor

Exterior paint or stain, sealant

Tool list (one-trip shopping): Tape measure, circular saw, drill/driver, 3/8 and 1/2" sockets, hammer, level, speed square, wire cutters, staple gun with exterior staples, tin snips, work gloves, safety glasses.

Illustration prompts (sketch these quickly): 1) Top-down yard layout showing coop placement, run, water source, and set-back from property line. 2) Cross-section of coop: floor, roost height, nesting box placement, vent locations, and burial apron detail.

Troubleshooting tips (quick fixes)

Permit denied: talk to zoning officer for specific reason; often changing setback or reducing number of birds solves it.

Poor drainage: elevate coop on concrete blocks or gravel bed.

Too many predators: add buried hardware cloth and change latches to raccoon-proof hasps.

Finish this chapter by drawing your simple site plan, checking rules, and buying materials. After that you'll be ready to build with confidence.

Weekend-by-weekend Build Plan — Finish a Functional Coop in 3 Weekends

Break the job into bite-sized, ordered tasks so you don't stall. Follow these three weekend plans; each weekend has a clear goal, exact materials to stage, and the tools to bring. Stick to the schedule and you'll have a weatherproof, lockable coop and run ready for birds.

Weekend 1: Site prep, foundation, and footprint

1) Pick the highest spot in your yard; shift footprint upslope 2–6 inches if drainage is marginal. 2) Mark a 4×8 footprint with stakes and twine; square by measuring diagonals until equal. 3) Excavate 6" across the footprint, compact crushed gravel to a 6" bed, slope 1/8" per foot away from the coop. 4) Set four 4×4 pressure-treated post pads (concrete blocks or 12" sonotubes) at corners, recheck diagonals, fasten a 2×4 perimeter frame with exterior deck screws. Materials: gravel, 4×4 posts, 2×4s, concrete blocks, exterior deck screws. Tools: shovel, plate tamper

(or 2×4), circular saw, drill. Face the long side to the south for winter sun; leave 5' clearance from large Douglas-fir to reduce needle buildup. Outcome: level, elevated base to keep bedding dry.

Weekend 2: Frame walls, door, and nesting box shell; weatherproof roof

1) Build two end walls and one long wall flat on the base using 2×4 studs at 16" on-center with top and bottom plates; assemble with 3" exterior screws. 2) Lift walls, brace temporarily, anchor through the 4×4 pads with 3/8" carriage bolts spaced every 4' along plates. 3) Cut roof rafters spaced 24" o.c.; set rafters for minimum 4:12 pitch with 6" eave overhang to shed Willamette Valley rain, cut birdsmouth seats, install 1/2" sheathing, 30# roofing underlayment, then attach corrugated metal or asphalt shingles with flashing on all seams. 4) Rough-cut nesting box openings 12"x12" each and a 24"x72" human access door. Tools: level, speed square, tin snips, drill. Outcome: dry, lockable shell.

Buy Smart — Local Sourcing, Salvage, and Material-Prep Checklist

Lower costs and speed the build by sourcing locally and inspecting materials before you load them into your truck. Use this checklist to pick good reclaimed lumber, avoid hazards, and treat materials so they last in Lane County's wet climate.

Where to shop and what to ask

Action steps: 1) Call or visit three local sources: a lumber yard, a farm-supply store, and a reuse center (Habitat ReStore or salvage yard). 2) Ask each for stock availability, price per linear foot for 2x4 and 4x4, sheet price for metal roofing, whether they cut to length, and delivery cost. 3) Search Nextdoor/Craigslist for pallets, doors, windows; message sellers: "How long owned? Any rot or insect damage? Can you send close-up photos?" 4) Prioritize nearby suppliers for treated posts and roofing to avoid wet-haul issues. Outcome: a three-vendor quote sheet with cut and delivery totals to pick the best deal.

Inspect and prep materials before use

Inspection checklist and prep steps: 1) Reject wood with soft spots, active insect tunnels, or end-grain that crumbles when pressed; mark rejects with red tape. 2) For painted pieces of unknown age, assume lead: strip outdoors with a chemical stripper or power-sander, then seal with an oil-based exterior primer. 3) Buy new exterior-grade fasteners (stainless or hot-dipped galvanized screws and carriage bolts); discard rusty lag bolts. 4) Dry reclaimed wood under cover 48 hours, then apply two coats of exterior water repellent to cut ends. 5) Wear an N95 respirator and leather gloves while sanding. Outcome: durable, bird-safe materials for Lane County's wet climate.

Chapter 2: Build a Secure, Dry Coop and Run — Step-by-Step 4-Hen Plan

You can build a safe, dry coop in a weekend using common lumber and simple hardware. This chapter gives a numbered build sequence, exact materials for a sturdy 4-hen coop with run, and practical details that save time and headaches. Expect humor, sawdust, and eggs in 3–6 months.

Outcome: Completed 4 ft x 8 ft coop with attached run, predator-proofed, ventilated, and ready for bedding and birds.

Total build time: Two people, 1–2 weekends. Solo builder, add a day.

Materials for 4-hen coop + run (buy list)

2x4s: 12-15 pieces (for framing and roosts)
4x4 posts: 4 pieces (support base)
3/4" exterior plywood: 3 sheets (floor and some walls)
T1-11 siding or exterior plywood: 3 sheets
Roofing: 1 bundle shingles or 8 ft corrugated metal
1/2" galvanized hardware cloth: 25 ft x 3 ft roll (run and vents)
Hinges, padlockable hasps, carriage bolts, exterior screws
Nesting box materials: 1/2 sheet plywood
Outdoor paint or stain and caulk
Gravel or paving stones for coop pad (optional)

Tools checklist Circular saw, cordless drill, speed square, tape measure, level, stapler for hardware cloth, wire cutters, ratchet + sockets, ladder, safety glasses, gloves.

Step-by-step build (follow in order)

Build the base (2-4 hours)
Cut two 8 ft and two 4 ft 2x4s for outer frame. Assemble a rectangle and flatten it with a level. Fasten with screws and corner blocks.
Attach 4x4 corner posts to lift the frame 6–12 inches off the ground to avoid damp and rodents. Use concrete blocks under posts if ground is soft.
Screw 3/4" plywood floor to the frame. Seal edges with exterior caulk or paint to extend life in Lane County's wet climate.
Frame walls and roof (4–6 hours)
Use 2x4 studs 16" on center. Include a window opening high on one wall for screened ventilation (1 sq ft total).
Add a simple sloped roof for water run-off. Use a 3/12 to 6/12 pitch.
Install roofing underlayment and shingles or corrugated metal.
Install nesting boxes and roosts (1-2 hours)

Build two 12" x 12" nesting boxes, mount them 18–24" off floor and slightly tilted forward for drainage. Hang a clean-out hinged front or accessible landing so you can reach eggs without entering the coop. Install roosts 2-4 ft high. Place roosts higher than nesting boxes to discourage hens sleeping in boxes and so eggs end up in boxes.

Build run and predator protections (3-5 hours)

Frame a 4 ft x 8 ft run attached to coop. Cover with hardware cloth on all sides and top. Staple hardware cloth, then secure with screws and fender washers where possible.

Bury hardware cloth 12" into the ground and leave an outward apron of 12-18" to stop digging predators. If ground is rocky, attach 2x4 kickboards and bury them slightly.

Use raccoon-proof latches. Install a lockable gate or corridor that prevents raccoons from reaching inside through small gaps.

Ventilation and weatherproofing (1-2 hours)

Install screened vents high on the walls to vent warm moist air. Add low vents near floor level to create airflow. Cover vents with hardware cloth to keep pests out.

Paint or stain the exterior with at least one coat. Inside paint is optional; focus on sealing seams and edges. Use roof overhangs to keep rain off vents.

Final checks and bedding (30-60 minutes)

Check all gaps—no loose chicken wire flaps or nail pops. Tuck bedding (pine shavings or straw) 2-3 inches deep in the coop. Put a shallow waterer and feeder inside.

Place a movable water bucket with a nipple or heated base in winter if freezes are common in your microclimate.

Quick diagram prompts 1) Framing elevation showing roost height, nest box placement, and vent locations. 2) Run cross-section showing hardware cloth burial and apron detail. 3) Door/latch detail with raccoon-proof hasp.

Troubleshooting on the fly

Drafty coop? Add windbreak (plywood panel) on the windward side without blocking vents.

Raccoons working latches? Replace with spring-loaded, padlockable hasps and add an extra strap across the door.

Wet bedding in winter? Raise coop height, add gravel pad, and change bedding more often. Add a deep-litter system: layer shavings and let them compost slowly for insulation.

With this build you'll have a safe, dry home that needs only bedding and a few tools to keep clean. Next chapter: choose birds, introduce them, and collect your first eggs.

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Chapter 2: Build a Secure, Dry Coop and Run — Step-by-Step 4-Hen Plan

1.1 Build a raised, sealed base that stops rot, rodents, and wet bedding

Create a level, elevated floor that stays dry in Lane County rain and blocks rodents before you add walls or bedding.

Assemble the outer frame and raise it

Assemble an 8x4 rectangle from two 8-ft and two 4-ft 2x4s: mark and predrill three screw locations at each corner to prevent splitting. Place the frame on flat ground; shim level with scrap 2x4s, then fasten with 3" exterior wood screws and two 1/4" carriage bolts per corner for rigidity. Attach four 4x4 posts to lift the frame 6–12" using a lag bolt through the 2x4 or galvanized post brackets in wet spots. Seat concrete blocks or compacted gravel pads under soft soil and relevel after seating. Tools: circular saw, cordless drill, tape measure, level, clamps, socket wrench, exterior screws, carriage bolts. If the frame rocks after bolting, drop a plywood shim under the low post and recheck level.

Install and seal the plywood floor for moisture resistance

Cut a 3/4" exterior plywood panel to 4x8 ft and fasten with screws every 6" around the perimeter and every 12" along interior joists; countersink screws slightly. Apply polyurethane construction adhesive to joists and bed the plywood before screwing to eliminate squeaks and gaps (optional but recommended). Run a continuous bead of exterior caulk along all perimeter edges and over screw heads; prime with exterior primer, then paint or stain rated for heavy moisture. Fit a 1" beveled threshold at the coop door, sealed with caulk under the bevel to shed water and stop bedding tracking. Diagram prompt: top-down and cross-section showing screw spacing, caulk beads, adhesive lines, and threshold detail.

Build a predator-proof run: bury hardware cloth, secure the top, and lock it tight

Construct a run that keeps raccoons, coyotes, and neighborhood dogs out while letting hens free-range safely.

Frame the run and install hardware cloth with a buried apron

Build a 4 ft x 8 ft run frame from pressure-treated 2x4s, attach to coop wall or free-standing with 3 cross-braces to prevent racking. Wrap all sides and top with 1/2" galvanized hardware cloth, stapling every 3" and driving galvanized screws with fender washers every 12" for rigidity. Dig a 12" trench around perimeter, sink cloth vertically 12" and extend a 12–18" outward-facing apron; stake the apron flat and cover with soil or pavers to stop digging predators. For rocky Lane County soil, fasten 2x4 kickboards to base, trench the cloth against the board, lap 6" under the board and secure with galvanized nails. Tools/diagram: roll cloth, heavy stapler, screwdrill, fender washers, shovel; diagram: run cross-section showing 12" bury depth and apron.

Install raccoon-proof latches and test the gate like a burglar

Mount spring-loaded, exterior-rated hasps with carriage bolts and backing washers through the gate and frame; use stainless or hot-dip galvanized hardware to resist Lane County winter corrosion. Add a second strap 6" below the first and use a weatherproof carabiner or small padlock during trials. Position gate to swing away from trees, fences, or climbable walls and seal gaps so none exceed 1/2". At dusk and at night, test by pushing, pulling, and inserting a gloved hand to mimic a raccoon; if any hand fits behind the hasp, install an angled metal guard over the hasp or move it outward. If raccoons still open it, switch to a rotating bolt hidden under an overlapping metal plate or add a top-access sliding pin.

Chapter 3: Get Chickens, Care for Them, and Collect Your First Eggs

Now the fun part. This chapter walks you through choosing birds that thrive in Lane County, introducing them to the coop, daily and weekly care routines, common problems and fixes, and exactly how to collect, clean, and store your first eggs. Short, practical, and realistic—no fluff.

Outcome: Healthy flock, steady egg supply, routines that fit into busy lives.

Step 1: Choose what you'll buy (chicks, pullets, or point-of-lay)

Chicks (cheapest): need brooder with heat lamp, expect eggs 18–22 weeks. Best if you want experience raising birds from day one.
Pullets (teenage hens): 12–20 weeks, cheaper than point-of-lay, eggs in 4–12 weeks.
Point-of-lay (ready to lay): 16–24 weeks, pay more but get eggs fast. Best if you want immediate payoff.

Choose breeds for Lane County weather: hardy and calm breeds like Rhode Island Red, Buff Orpington, Wyandotte, Australorp, and Easter Egger. These tolerate wet, cool weather and still lay reliably.

Step 2: Quarantine and introduction (follow these steps)

Quarantine new birds for 2 weeks in a separate brooder or pen to watch for illness.
During introduction, let new birds see resident birds through hardware cloth for 3-5 days to reduce fights. Then do short supervised visits in a neutral space like the run.
Feed treats and keep introductions calm after dusk or in enclosed spaces; chickens are less aggressive in the dark.

Daily and weekly care checklist (print and pin this)

Daily morning: check water (clean and full), check feed, collect eggs, sweep coop floor for big clumps of droppings.
Daily evening: secure coop, close pop door if using one, check for signs of injury or predators.
Weekly: replace bedding in nest boxes, top off shavings, clean feeders and waterers, check vents for blockage.
Monthly: deep clean with scrubbing and vinegar solution, inspect hardware cloth and latches, trim beak or toes only if you know how.

Feeding basics

Starter feed for chicks, grower at adolescence, layer feed when they start laying. Use 16% protein for layers and add oyster shell free choice for strong

shells.

No junk food. Kitchen scraps are fine but avoid salty, sugary, or sticky foods. Limit scratch as a treat.

Winter care in Lane County

Keep water from freezing: use heated waterers or change water twice daily. Place waterers off bedding to avoid wet litter.

Ventilation > heat: keep vents open to prevent ammonia buildup. Add more bedding for insulation or use deep litter method.

Troubleshooting common issues (quick fixes)

No eggs: check age first. If adults, look for stressors: new flock members, predators, changes in feed, or short daylight—use supplemental lighting only carefully (add 1 hour of light in morning, max 14 hours total).

Egg-eating: remove broken eggs immediately, minimize egg breaks by using nesting boxes with landing ledges, collect eggs twice daily. Consider roll-away boxes if problem persists.

Mites or lice: dust hens with diatomaceous earth or use approved poultry mite powder; deep clean coop and replace bedding.

Sick bird: isolate, provide warm, quiet space, offer electrolytes and bland feed, contact OSU Extension or a poultry-savvy vet if not improving.

Collecting and storing eggs (simple rules)

> **Collect eggs twice daily to reduce breakage and egg-eating.**
> **Do not wash eggs unless dirty; washing removes the natural bloom. If you must wash, use warm water slightly warmer than the egg, then refrigerate.**
> **Store eggs pointed end down in the refrigerator for best freshness.**
> **Unwashed eggs can be stored at room temperature for short periods but refrigerate if you want them lasting weeks.**

Local help and resources (Lane County-specific tips)

Contact the OSU Extension Service in Lane County for workshops, diagnostics, and local best practices.

Buy starter supplies from local farm supply stores or feed co-ops to support neighbors and get breed and feed advice tuned to our microclimate.

Follow these steps and you'll have a healthy little flock producing eggs and smiles. Keep routines simple, fix problems fast, and enjoy those first warm, slightly undercooked breakfast eggs. Yes, backyard eggs taste better. Science is optional.

Quarantine and Introduce New Birds Safely

Prevent disease and violent pecking by running a short, strict quarantine and a staged introduction. Follow these

steps exactly to protect your flock and save time on vet visits and flock trauma.

Quarantine protocol (actionable 14-day checklist)

1. Place a separate brooder/pen at least 10 feet from the main coop with feeder, waterer, heat lamp for chicks, and fresh bedding. Tools: thermometer, notebook, small first-aid kit. Diagram prompt: overhead sketch showing distances between quarantine pen and main coop. 2. Day 0: record bird ID, source, visible symptoms, and weight; start a daily log noting temperature and droppings. 3. Days 1–14: inspect twice daily for coughing, nasal/eye discharge, diarrhea, lethargy, or abnormal vent; log findings. If symptoms appear, isolate the bird, photograph signs, and contact OSU Extension or a poultry-savvy vet immediately. 4. Day 14: compare weight trend; clean and disinfect quarantine area with 1:10 bleach solution before reuse.

Stepwise introduction to resident flock (reduce fights fast)

1. Visual phase 3–5 days: place new birds where they can see residents through hardware cloth; feed both groups simultaneously to build positive association. 2. Supervised neutral visits on day 4 or 5: conduct five 10-minute sessions in a neutral zone such as the run; bring a long stick and towel for safe separation; never use hands to break pecking. 3. First night: keep newcomers in roost boxes inside the coop or use a pop door so they sleep adjacent but separated from residents to lower aggression. 4. Full integration after three calm supervised visits: grant full access, collect eggs twice daily for seven days, monitor for bullying, and immediately separate any injured bird. Local tip: Eugene mornings mask clucking—use sunrise light to time visits.

Daily Routine, Maintenance, and Egg Handling for Busy Lane County Residents

Create a compact, repeatable routine that protects flock health, prevents egg loss, and fits a busy schedule. These steps prioritize chicken welfare while minimizing daily time investment.

Daily and evening checklist you can do in 10 minutes

Morning (5 minutes): fill and check waterer; refill feeder; collect eggs; scan coop floor for fresh blood, abnormal droppings, or injured birds. Tools: bucket, coop broom, flashlight. Midday quick scan (2 minutes): inspect run for lethargy, wet bedding, or predator marks on fencing. Evening (3 minutes): secure all latches; close pop door manually if required; top off shavings in high-traffic areas; perform final head count. Frozen water: swap to warmed container and elevate off bedding. Troubleshooting: eggs stop — add one hour of morning light with a timer but keep total light under 14 hours. Mites — dust affected birds with food-grade diatomaceous earth and deep-clean nesting boxes immediately.

Weekly to monthly maintenance plus egg handling and storage steps

Weekly (15–30 minutes): replace nest-box bedding, scrub feeders and waterers with vinegar, check vents and hardware cloth for gaps; tools: stiff brush, white vinegar, replacement shavings, spare latch. Monthly deep clean: move birds to a temporary pen, remove all bedding, scrub floors and perches with a 1:10 white vinegar-to-water solution, rinse, dry, inspect for rusted hinges or chew-through spots, repair or replace hardware. Diagram prompt: before-and-after cross-section of coop showing 6–8 inch bedding depth and vent placement above roosts. Egg handling: collect eggs twice daily; do not wash clean eggs. Dirty eggs — wash with water 10°F warmer than egg, refrigerate immediately, store pointed end down. Local tip: buy oyster shell at a nearby feed store and contact Lane County OSU Extension for feed options suited to our wet, cool climate.

Start This Weekend

This guide gave you the local know-how and a simple plan. Don't wait for perfect conditions. A few focused steps now will turn a patch of Lane County yard into a safe, dry coop that delivers fresh eggs and a lot of joy.

Action now: pick a start date within seven days, call one local supplier for a price check, and block the first weekend on your calendar. Share a before photo in the Lane County chicken group or tag OSU Extension for quick feedback. Your challenge: name the day and post the photo in 48 hours. Do that and you're officially underway.