



# **Home Composting Rebate Program: Chicken Keeping**

Austin Resource Recovery

# Zero Waste

Compostables make up **40%** of the waste stream





# ARR Services

- ARR Services
  - Recycling
  - Trash
  - Yard trimmings
  - Street sweeping
  - Hazardous waste
  - Large Brush
  - Bulk





# ARR Carts



96-gallon  
**\$41.85**



64-gallon  
**\$23.30**



32-gallon  
**\$18.15**



24-gallon  
**\$16.90**

*\*Includes base fee of* **\$13.05**

**To change your Cart Size Call 494-9400**

# Curbside Organics Expansion

## Organics Pilot

- Currently 14,000 customers
- 3<sup>rd</sup> green organics cart
- Weekly collection
- Expanding city wide over the next 4 years





# The Rebate Process

[austintexas.gov/composting](http://austintexas.gov/composting)

	<b>Go Anywhere Plan</b>
Step 1	Purchase a chicken coop from <b><i>any retailer</i></b> of your choosing. <i>(Can only be used for Chicken Coop or Chicken Coop Kit, not accessories, chickens, or building materials)</i>
Step 2	Submit a rebate application with copies of your receipt. <i>(Only one Rebate PER Household: Either Home Compost Rebate OR Chicken Keeping Rebate)</i>
Step 3	Receive a \$75 rebate check from the City of Austin by mail. *
	<i>Please allow a minimum of 8 weeks for processing.</i>

# Keeping Chickens 101





# Why Chicken Keeping?

- Reduce trash and help Austin reach Zero Waste
- Save Money
- Natural insect control
- Build topsoil
- “Green” material for compost
- Grow healthy, vibrant plants.
- Free Eggs!
- Education and entertainment





Source: [nationalarchives.gov.uk](http://nationalarchives.gov.uk)

The logo consists of three curved, overlapping bands in blue, green, and brown, resembling a stylized chicken or a circular motion.

# Austin Chicken Math

- An average American throws away about  $\frac{1}{2}$  lb. food/daily (approximately 200lbs/year)
- An average size chicken can be put that food to good use through supplemental food source (when fresh) and composting.

So what?

**Chickens can be waste stream diverters in a big way!**



# Austin Chicken Math for **Food Waste alone**

If even **1%** of households (3,100) in Austin kept chickens...

Average 2.37 persons/household

3,100 households x 2.37 persons/household x .5 pound  
wasted food/person x 365 days =

We could conservatively divert **over 1.3 MILLION  
POUNDS of food alone** from the landfill each year!

**IMAGINE AUSTIN** with 50% of households raising  
chickens??

# More diversion with Output: Black Gold



- Average size hen produces **1 cubic foot of manure every six months**
- For each **100 lb. feed** consumed, expect **45 lb. droppings** dried weight
- Deposits high in NPK
- 10 chickens poop less than 1 “average” sized dog

# So What Else?




38.1% Austin MSW from  
yard trimmings

Yard Trimmings  
+ Chicken Manure  
= Compost!

Divert 27 tons yard  
trimmings

Over \$2M savings



# Chicken Compost = Building Topsoil

- Losing topsoil faster than we can replenish it

## Chickens to the rescue!

- Waste serves to super-charge the compost pile-highest fertilizer value of all livestock manure
- Scratching and pecking loosen Austin's heavy soils
- Healthy garden soil not only grows better plants and vegetables but also holds water better and reduces erosion.

# A Gardener's Best Friend



- Soil Aeration
- Black Gold!
- Eat most any bugs – crickets, grasshoppers, roaches, snails, slugs, earwigs, beetles
- Will also eat small reptiles...for better or worse

# Education and Entertainment



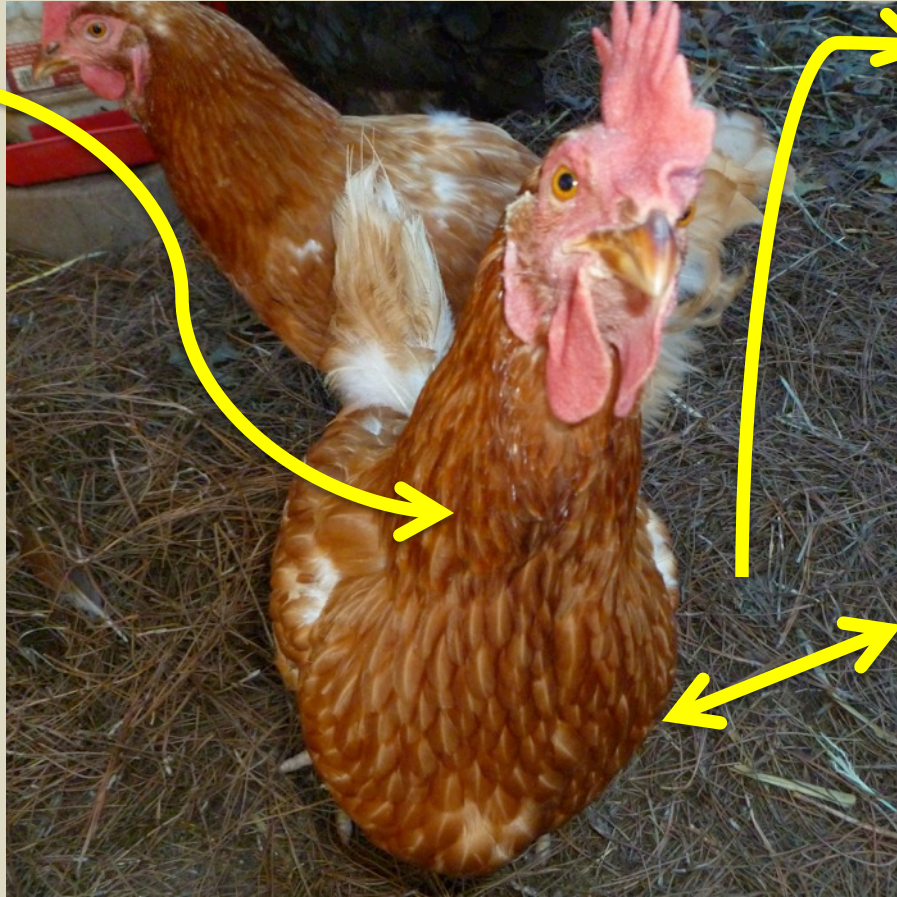
- Children learn and appreciate where food comes from
- Teaches responsibility and awareness for animals and our food



# Chickens: Inputs and Outputs

## INPUT

- Food
- Water
- Air
- Shelter
- Dust
- Grit
- Buddies



## OUTPUT

- Meat
- Eggs
- Feathers
- Manure
- Methane
- CO<sub>2</sub>

## BEHAVIORS

- Scratching
- Foraging
- Flying



# Chickens and AUSTIN CODE

Know your local codes:

Must comply with all sections of **Title 3 (Animal Regulation)**

- Can't roam free **(3-2-1)**
- Can't make excessive noise **(3-2-2)**
- Must be kept in clean and healthy condition **(3-2-5)**
- Fowl must be kept in an **appropriate enclosure** no closer than **50 feet** to a neighboring structure other than that of the birds' owner or handler **(3-2-16)**
- Maintain property in a sanitary condition **(10-5-21)**

Also check any HOA or neighborhood specific regulations.



# Definitions

- **ENCLOSURE** means a pen, cage, coop, loft, stable, shed, structure or enclosure used to house a bird, fowl, livestock, or other animal.
- **FOWL** includes a chicken, turkey, goose, guinea hen, or duck.
- **OWNER** means a person who owns, feeds, keeps, maintains, or harbors an animal or who knowingly allows an animal to remain on the person's property.
- **HANDLER** means a person who has charge, care, custody, or control of an animal.



# Chicken Breeds

- Size- Standard or Bantam?
  - Standard- eat a lot, lay medium-large eggs
  - Bantam- eat much less, lay smaller eggs
- Pure or crossbred?
  - Hybrids/crossbreeds are often the best egg layers and fastest growers
  - Purebreds, “designed” to fill specific niches/environments
- Others things to consider
  - Climate, Kids



# Chicks or Pullets/Hens?

- **Chicks** are generally under a week or so old
- **Pullets** are female chickens under 1 year of age
- **Hens** are female chickens 1 year or older in age
- **Cockerels** are male chickens under 1 year of age
- **Cocks** (“roosters”) are male chickens 1 year or older in age

# CHICKS VS. PULLETS/HENS

Chicks	Pullets/Hens
More sources from which to purchase and broader breed selection available	Less sources and variety at this age
Slightly more intensive early care	More ready to go “out of the box”
Longer time until first egg – but you know exactly what went into making that egg	Generally faster to that first egg for breakfast



# Integration to Existing Flock

- Keep new birds in quarantine a minimum of 28 days
  - Do not integrate if signs of illness
- Ideally introduce a minimum of 2 birds to flock at time
- Have similar size introductions best
- Introductions on roost in night



# Types of Coops

- A *brooder* is temporary housing with reliable heat source until chicks feathered out
- A *coop* is permanent housing for a feathered out chicken
- A *coop and run* is permanent housing for chickens that also includes an enclosed outdoor fenced space for daytime use.
- A *chicken tractor* is mobile housing that includes a coop and small run space.



# Things to Consider...

- Space availability
- How much access to garden/yard
- Predators in your area
- Climate and seasons





# Getting Started...

## Coop and Run Essentials

- Adequate space and light- (min 2-3sf/per chicken inside coop, 8-10sf/per chicken in run, more space the better!)
- Predator protection
- Weather protection (from moisture and drafts)
- Good ventilation in coop
- Essential elements (roosts, nest boxes, feed, water, etc.)





# Additional Coop Considerations

- **Roosts** should ideally be 18” – 24” from ground
  - This should be the highest perch point of coop
- **Nest boxes** of 12” x 12” minimum for standard size bird with privacy but good ventilation
  - Can be wider – consider extra space for Texas heat
  - 1 nest box to approx. 4 birds
- **Make sure feeder and waterer sanitary**
  - Key to keeping birds healthy is healthy environment
- **Add fresh bedding, clean coop as needed** to keep right environment – not too wet or dry
  - Don’t use Cedar shavings!
- **Easy access** for birds and consider for humans, too!

# Predator Protection



- THE KEY to successful backyard flocks
- Make sure your coop is PREDATOR PROOF!
  - Chicken wire will not keep out predators
  - Use 1/4 in. hardware cloth
- Wire or barrier at coop edges

# Compost and Chicken Runs



- Can build your compost pile inside coop and run.
- Let chickens do all the turning for you.
- Limits chicken scratching/denuding on yard.
- Need to keep fresh materials coming in.

# Chicken Tractor



- Mobile – distributes chicken manure and builds healthy topsoil when moved regularly.
- Can be smaller foot print.
- Good way to get flock access to fresh pasture while still protected.

# “Victory Garden” style. (Double Run Chicken System)



Chickens fertilize garden bed

Crop grown and harvested



New crop sown and chickens are moved

Chickens dig over old crop and fertilize it

# Chicken Moat



- Double fencing, creating chicken run around garden.
- Garden pest control
- If not too wide, difficult for aerial predators to swoop.

Source: Mrs. Fancy Pants,  
BackyardChickens.com





# Recap: Coop Checklist

- ✓ Predator Protection
- ✓ Food and Water
- ✓ Ventilation
- ✓ Nest boxes
- ✓ Roosts
- ✓ Bedding Material
- ✓ Adequate spacing
- ✓ Access (doors)
- ✓ Seasonal element design
- ✓ In compliance with City Ordinances

# Chicken Care





# Chicken Feed

- The type of feed you provide your birds is based on age and purpose (laying, meat, or show)
- Chickens Need
  - Energy - Carbs and Fats
  - Proteins to develop - Pellets and crumbles most convenient way to supply
  - Grit- Insoluble sand, small stones, limestone, oyster shells, etc. allows bird to grind up food in gizzard



# Food for Egg Laying

Feed Type	Approx. % Protein	Chicken Age	Approx. Amount per Hen
Chick Starter Medicated or Non-Medicated	20%	0 – 6 weeks	1 lb. week/chick
Pullet Developer	16.5%	7 – 18 weeks or until lay	1.15 lb week/pullet
Layer	18%	Once pullet laying	0.25 lb day/bird

Medicated chick starter is to prevent Coccidiosis, the most common form of death among chicks.

Amount of feed required may vary by individual bird and/or environmental conditions. Birds for harvesting or show have different dietary requirements than those raised for eggs.



# Types of Chicken Feed

- **Course Grains**- Easiest form to buy, good scatter feed
- **Pellets and Crumbles** - Most artificial type of feed, but most convenient for growing and laying
- **Mash** – Wet, Traditional feed of powdered grains/meals and liquid (water, milk, meat soup, etc.)
- **Chicken Scratch** is NOT feed, but a treat and should be provided sparingly, if at all.
  - It has “energy” for the birds and can raise their body temperature. Keep this in mind during summer heat.



# Types of Chicken Feed

- **Insects** - Lay boards on the ground and turn over after a few days
- **Green Forage** - Makes yolks yellower, provide extra nutrients, exercise, and entertainment for birds (lawns, hanging baskets, alfalfa, comfrey, clovers, etc.)
- **Scraps**- Reduces waste. Keep fresh, don't feed moldy, do your research some can be poisonous to birds



# Scraps to Avoid for Chickens

- Onion/garlic can change flavor of eggs
- Tea leaves, coffee grounds, rhubarb leaves, soap, salt or salted products
- Citrus juice and skins, avocado skin/pit, fish, sugary products (candy, chocolates)
- Dried or raw beans/rice
- Unripe/leaves of tomatoes, potatoes, eggplants

# Water

- Constant supply of fresh, accessible water key to good health
- In summer keep waterer in shade, especially if plastic
- For chick care, do not use open dish – chicks can drown
  - Shallow dish with marbles or pebbles if needed








# Quick Guide: Chicken Health

- **Dust Baths**
- **Clipping Wings-** if flying over fences
- **Stress**
- **Heat and Cold**
- **Broody Hen:** When a hens hormones tell her its time to incubate eggs
- **Health Issues:** Worms, Fleas, Mites, Diarrhea “dirty pants”, Egg Binding



# Don't be too concerned...

- **Molting-** feather loss once a year in mature chickens
- **Young layers** - eggs with thin or no shell
- **Older layers** – wrinkled, rough, thin shell
- **Pecking Order-** ensure plenty of space in coop/run

# Want more? Get Funky!

- 10<sup>th</sup> Annual Funky Chicken Coop Tour



SAVE THE DATE

**SATURDAY  
APRIL 21, 2018**

10AM-4PM RAIN OR SHINE

COMING TO A COOP NEAR YOU!

[AustinCoopTour.org](http://AustinCoopTour.org)



# Questions?

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Austin Resource Recovery