108 Attachment 1

Township of Monroe

SCHEDULE A

(Section 108-5.22)

RECOMMENDED GUIDELINES FOR HOME ANIMAL AGRICULTURE IN RESIDENTIAL AREAS

I. INTRODUCTIONS AND DEFINITIONS

The purpose of these guidelines is to assist citizens and local government officials in establishing criteria for the conduct of home agriculture involving domesticated animals on private residential property within the municipality.

THESE GUIDELINES ARE NOT CRITERIA FOR THE CONDUCT OF COMMERCIAL AGRICULTURE WHICH IS MORE INTENSIVE AND CONTINUOUS.

Home agriculture may be defined as:

The activity of producing domesticated animals or their products for home use or consumption including breeding, growing, caring, housing and product preparation where sales are incidental.

The key concepts are "home-use or consumption." A municipal zoning ordinance permitting home agriculture might include language similar to the following:

Home agriculture, including home animal agriculture, may be conducted in the Residential Zone so long as animal numbers, as well as care and management, reasonably conform to current recommended management practices established in Recommended Guidelines for Home Animal Agriculture in Residential Areas published and revised by the N.J. Cooperative Extension Service, NJ Agricultural Experiment Station.

It may be that there are pre-existing "home animal agriculture" operations now in the municipality. Although it is presumed that these can continue, without expanding on the basis of the "grandfather clause concept," such operations shall be conducted reasonably within the recommended guidelines.

A. BASIS FOR RECOMMENDATION. The guidelines established in Recommended Guidelines for Home Animal Agriculture in Residential Areas represent the best collective professional judgment and opinion of a select committee of the faculty of the N.J. Agricultural Experiment Station considering the current state of the art and recognizing that both resident home agriculturists and their neighbors should have reasonable use of their properties unrestricted by others. There is the doctrine "an owner's enjoyment of his land should not be unreasonably interfered with."

The committee considered the following items in developing these guidelines:

Environmental Stress	Waste Management
Animal and human health	Safety
Land carrying capacity	Aesthetics
Shelter and confinement needs	Municipal Administration

B. GENERAL WASTE MANAGEMENT

Animal waste, often a concern in residential zones, need not be a problem. Fresh manure has little odor and is fly free. Proper management can prevent annoyance to neighbors.

Manure generally produces odors when it is allowed to accumulate. By eliminating these conditions, odor and fly problems can be minimized. Management is the key.

During the cold months and with ample bedding materials and good management practices, odors and flies are not generally a problem. As weather moderates, odors and flies can develop. The following management suggestions are offered:

Dry (except for normal daily wastes) interior stalls be maintained. Outside lots should not become muddy either due to weather or animal activity.

Daily removal of all the manure in interior housing or exterior lots. The manure, once removed, should be handled by one of the following alternative ways:

1. Daily placement in a plastic garbage bag, tightly closed, for periodic removal from the premises with normal garbage collection or stored for later use, such as incorporation into the soil. Stored manure should not accumulate for more than three weeks.

2. Used immediately and incorporated daily into the soil of a garden, but not as a surface mulch.

3. Incorporated into a bona fide composting procedure so odors or fly breeding and flies cannot be a by-product. A manure pile does not qualify as a composting procedure.

4. Store in an undercover (rainfree) well-drained, screened and fly-free storage area, located 50 feet or more from the property line, until the manure can be handled in any of the above alternatives 1, 2, or 3.

II. GENERAL RECOMMENDATIONS FOR ANIMALS
(numbers, care and management)

A. THE ANIMAL UNIT CONCEPT. A handy concept to use in considering animal numbers is the "animal unit." By using the large mature, domesticated animals such as the horse or cow as a unit of one, smaller or immature animal numbers may be considered in a proportionate ratio. The animal unit may be related to the carrying capacity of an area of land in respect to the environmental health, exercise and food requirements. It is also useful in determining spacial requirements for animal housing.

B. LARGE AND MEDIUM SIZED ANIMALS
(such as cattle, horses, sheep, goats and swine)

Lot Size

The minimum lot size to be considered, including the dwelling site, shall be one acre. No more than one animal unit should be kept on the first acre and no more than one animal unit for each acre up to a total lot size of three acres. Above a three-acre lot size, animal numbers should be determined on a site-specific basis but not exceed more than one and one-half (1 1/2)

animal units per acre. Parts of an acre above one acre may be used to determine numbers of mature large and medium-sized, or immature large and medium-sized livestock.

For a specific description of animal units by livestock category, see Table 1 on the following pages.

Care and Management

Fencing and Outside Lot

Large and medium-sized domesticated animals need exercise and living space compatible with their age and size.

An outside lot, when used to provide exercise and possibly some grazing, should be fenced in a manner to be safe to animals and man and located in a manner that livestock will not cause damage to a neighbor's property. Fences constructed for the exterior fence line should be made of woven wire or wooden materials and be 48 inches high with posts not more than 10 feet apart. Barbed wire should be avoided except where sheep fence may require barbed wire to be strung at the bottom and the top of the exterior fence, in addition to woven wire, for the purposes of dog control. Electric fence may be used for interior partition fences, where applicable but not for exterior fence.

The fence lot should be so located and managed so that it does not become muddy due to weather conditions, from surface drainage, or activity of the confined animals, and drainage should prevent any standing water from accumulating. Lots should not be extended to reach streamways passing through the property.

If an outside fence lot is provided for swine, it must be paved and have adequate provisions for drainage.

Recommendations for minimum lot sizes are indicated in Table 2.

Table 1

ANIMAL UNITS FOR SPECIFIC LIVESTOCK CATEGORIES OR TYPES

Livestock	Units Per Animal	Animals Per Unit	Remarks
Cattle: Dairy - 1 year or older	1	1	Or cow with nursing calf.
Under 1 year	1/2	2	
Beef : 1 year or older	1		Or cow with nursing calf.
Under 1 year	1/2	2	
Steers: 1 year or older (dairy or beef)	1	1	
Under 1 year	1/2	2	
Bulls: 1 year or older (dairy or beef)			
Under 1 year	1/2	2	
Horses: 6 mos. or older - all breeds and sexes	1	1	Includes ponies, mules, burrows, donkeys.
			Mares with foal until weaned or up to age of 6 mos. = 1 unit.
All breeds under 6 mos.	1/2	2	(See above remarks).
Sheep: All breeds and sexes - 1 year or older	1/5	5	Ewe with nursing lamb up to 3 mos. = 1/5 unit.
Lambs over 3 mos. and up to one year	1/10	10	
Goats: All breeds and sexes. Same as sheep (see above)			
Swine: All breeds - over one year	1/2	2	Sow with suckling pigs under 3 mos. = 1/2 unit.

*32 Bird Units = 1 Animal Unit (See Table 3)

Note: Combination of different livestock and fowl are acceptable so long as total densities are not exceeded for acreage available.

Example: 1 swine and 16 chickens would be acceptable on 1 acre. However, 1 horse and 16 chickens would not.

Table 2

AREA MINIMUM FOR OUTSIDE LOTS FOR LARGE AND MEDIUM DOMESTICATED ANIMALS

	Per Animal Unit	
Horses	Minimum	1,000 square feet
Cattle	Minimum	300 square feet
Sheep and goats	Minimum	300 square feet
Swine	Minimum	100 square feet

Interior Animal Housing

All confined, domesticated animals should have shelter accessible which will keep off rain, provide shade and give protection from the wind. Floor conditions should prevent slipping and provide for the bedding to be routinely dry. When an exterior lot is accessible, a minimum of 100 square feet of interior floor space per animal unit should be provided. If no exterior lot is provided, additional, adequate space, at least double the above interior floor space, should be accessible per animal unit. Water should always be accessible.

Recommended plans, for structures to meet these animal shelter needs, are available through the Cooperative Extension Service, New Jersey Agricultural Experiment Station.

The minimum distance from a property line for locating a building for housing large animals should be 50 feet unless there are reasonable conditions to modify this setback.

Use of Other Information Available

Other or more detailed care or management procedures should be obtained as needed from the Cooperative Extension Service, New Jersey Agricultural Experiment Station.

C. POULTRY

(Chickens, ducks, turkeys, geese and game birds such as pheasants and quail)

Bird Unit

The animal unit referred to with large domestic animals does not apply to poultry. However, a similar concept which we call a bird unit may be used. Since chickens are the most prevalent fowl in home agriculture — they will be used as a base (bird unit) in calculating the number of fowl (other than chickens) permitted on a given site. A factor of one unit has been assigned to the adult chicken. Immature poultry have been assigned a fractional unit, while larger poultry such as turkeys, ducks and geese are expressed in large units. For example: a mature goose would require the space of four chickens and therefore, fewer would be allowed for a particular area as compared to chickens.

It is recommended that for home agriculture, not more than 32 bird units be allowed on any one-acre lot and no more than 32 bird units for each additional acre, up to three acres — a total of 96 bird units.

Commercial poultry operators would have a much higher density. However, the bird units indicated here are for home agricultural purposes and the number recommended would be more than adequate to meet the needs for home-use and consumption.

Refer to Table 3 for recommended bird unit comparison.

Table 3
POULTRY BIRD UNITS* FOR USE WITH HOME ANIMAL AGRICULTURE

	"Bird Unit" Factor	Lot Size - (acres)				
		1	2	3	4	5
		Max. Number Bird Units				
Chickens (mature)	1	32	64	96	128	160
Broilers & fryers	1/3	The maximum number of bird units (regardless of specie) should not exceed those specified for chickens.				
Ducks	2					
Turkeys	4					
Geese	4					
*32 Bird Units = 1 Animal Unit						

To determine the combination of birds that may be permitted on, for example, one acre, the following calculations are suggested:

Multiply the bird number desired by the bird unit factor — the total should not exceed 32

Example:	10 chickens	10 x 1 = bird units
	2 turkeys	2 x 4 = bird units
	7 ducks	7 x 2 = 14 bird units

Management Recommendations for Home Flocks

A small flock of fowl may be raised on a conventional litter floor with or without access to an outside yard, or confined to cages. When confined to cages a minimum of 60 square inches of cage floor space per bird should be provided. If the conventional floor system is used, birds should be provided with a minimum of two or three square feet of floor space per chicken. Bantams may be allotted one-half of the floor space recommended for standard size breeds.

If poultry has access to an outdoor yard, the yard should be a minimum size of 15 square feet of yard space per chicken. The yard must be properly maintained so as not to create odors, particularly during rainy or hot, humid days. Turkeys, ducks and geese require a yard size 50 percent larger than that for chickens. Three times as many broilers, fryers, etc. can be accommodated with no additional yard or house space, provided sanitary conditions are maintained.

Sanitary conditions within the house and the yard must be maintained in order to minimize the fly and odor problems. Fly and rodent control measures must be followed according to the recommendations of the New Jersey Agricultural Experiment Station (NJAES).

Poultry manure should be applied to the soil as organic fertilizer, worked into a compost pile, or disposed of off the premises. If stockpiled, it must be covered with soil or be in an enclosed, screened area. When disposed of on the land, the amount should not exceed the recommended levels of 500 pounds per thousand square feet or the latest recommendations of the New Jersey Agricultural Experiment Station.

In view of the many variables involved such as: 1) location, 2) type of management system to be followed, 3) nature of surrounding area, 4) types of birds to be raised, etc., some situations should be reviewed with knowledgeable people in the field of agriculture. The county agricultural agent, along with specialists from the state land grant college, and/or other authorities in this area may assist in this capacity.

Fencing and Outside Lots

Although poultry may be raised entirely under cover with no access to the outside, some home agriculturists may want to provide an outside lot or poultry yard. If such a lot is provided, it should allow for 15 square feet of space per bird unit. If birds have access to a wire porch, a similar square footage should be allowed.

The yard should be fenced with wire and sufficiently strong and high enough to keep dogs and other predators from entering. The yard should be kept free of debris, weeds and standing water and suitably screened with shrubbery or other appropriate devices; if visual aesthetics are a consideration. The yard should not be placed any closer than 25 feet from neighboring property lines and should be behind the rear of the dwelling, with the normal dwelling setback from the roadway.

Poultry Waste Management

Under the conventional floor system, desirable house conditions may be maintained through a deep litter management program. Litter, consisting of dry absorbent material such as straw, ground sugar cane, wood sawdust or shavings, is added to the floor to a depth of 4 to 6 inches.

The composting action, which subsequently takes place between the litter and the poultry droppings that accumulate daily, should result in dry floor conditions that will minimize flies and/or odors. Litter floors, when properly managed, need to be cleaned only once annually.

Dropping boards beneath roosting areas and the area beneath cages, when manure accumulates, must be cleaned once every 3 to 5 days.

Poultry manure can be applied to the soil in the vegetable garden. It should be applied at a rate not to exceed 500 pounds per 1,000 square feet no more than once every three months for the total amount. Manure should be incorporated into the soil and not used on the surface as mulch. It may be composted or stored as outlined under the Animal Waste Management section of these recommendations.

Use of Other Information Available

Other more detailed management practices for poultry should be obtained as needed from the Cooperative Extension Service, New Jersey Agricultural Experiment Station.

D. PIGEONS

Pigeons are typically confined to a loft or "fly" (a screened exercise area for pigeons) which will also include an interior roosting area where pigeons may be out of the weather. The loft, depending on the particular arrangement desired by the owner, may or may not allow pigeons to have contact with the ground. Pigeons, properly maintained, are compatible with small residential lots. Lots as small as one-fourth acre are acceptable as a minimum for pigeon raising. It is recommended that the loft or "fly" structure be located not less than 25 feet from the property line.

The animal waste from pigeons should be handled in a manner similar to the earlier discussions on animal wastes. It can be a valuable organic fertilizer additive for use in gardening but should not be applied at more than 500 pounds per 1,000 square feet no more than once in three months for the total amount.

The recommended density for raising pigeons in relation to lot size is indicated in Table 4.

Table 4 PIGEONS				
(1 pigeon = three-tenths of a bird unit)				
Lot Size in Acres				
	1/4 to 1/2 (max. no.)	1/2 to 1 (max. no.)	1 to 3 (max. no.)	3 or more (max. no.)
Pigeons (mature)	50	100	150	200

Young pigeons (squabs) not counted until they mature.

Use of Other Information Available

Other or more detailed management practices for pigeons may be obtained as needed from the Cooperative Extension Service, New Jersey Agricultural Experiment Station.

E. RABBITS

Rabbits are generally confined in cages with wire bottom floors. Usually the rabbit is provided with an exercise area made of wire that is exposed to the outside and has a wire bottom through which the animal waste may fall onto the ground or in dropping pans. In addition, they are provided with individual boxes to protect them from weather and provide security and seclusion. The entire arrangement is sometimes referred to as a hutch and is raised off the ground for purposes of security, ease in caring for the rabbits and to provide sufficient space to clean under the cage. It is recommended that hutches be no closer to the property lines than 25 feet. A recommended cage would be 36" x 30" x 18" high. Such a cage so constructed, with two partitions, can accommodate three four-pound rabbits; without partitions, one 12-pound rabbit.

Animal waste must be cleaned every three to five days and handled in a manner similar to the discussion in previous sections on animal waste. Some rabbit producers have an earthworm pit beneath the rabbit cage onto which the rabbit wastes accumulate. The earthworms then make use of this organic matter. Such an arrangement is acceptable if properly managed and can provide a continuous source of fishing worms during the warm season months.

Acceptable densities for rabbits are indicated in Table 5.

Table 5 RABBITS			
(six-tenths of a bird unit)			
Lot Size in Acres			
	1/4 to 1/2 (max. no.)	1/2 to 1 (max. no.)	1 to 3 (max. no.)
Rabbits (mature)	25	50	75

Young rabbits are not counted until mature.

Use of Other Information Available

Other more detailed management practices for rabbits may be obtained as needed from the Cooperative Extension Service, New Jersey Agricultural Experiment Station.

FOOTNOTES

1. DEFINITIONS.

   a. Commercial Agriculture. The activity of producing principally for sale plants, animals or their products for the use or consumption by man including in a primary sense the growing, harvesting, storage, preparation for use and marketing of the products and those inputs essential to such activities, including the application of all technologies and activities, including the application of all technologies and methodologies approved by the New Jersey Agricultural Experiment Station or equivalent agricultural research institutions. These shall include, but not be limited to soil preparation and management; fertilization; weed, disease and pest control; waste disposal; irrigation; drainage and water management, grazing, or harvesting by man or animal.

      For example, commercial agricultural production includes, but is not limited to: forages and sod crops; grains and feed crops; dairy animals and dairy products; poultry and poultry products; game birds; livestock, including beef cattle, sheep, swine, horses, ponies, mules or goats, including the breeding and grazing of any or all such animals; bees and apiary products; fish; fur animals; trees and forest products; fruits of all kinds, including grapes, nuts and berries; vegetables; nursery, floral, ornamental and greenhouse products.

   b. Neighborhood Agriculture. Commercial agriculture conducted in an area of predominantly residential, business/commercial or industrial use which is oriented toward retail sales and generally limited to horticultural production such as floral, nursery, and fruits and vegetables but which may include low density animal agriculture such as poultry on a small scale.

   c. Home Agriculture. The activity of producing principally for home use or consumption, plants, animals or their products by man, including in a primary sense, the growing, harvesting, storage, preparation for use and where any sales are incidental, when conducted and performed within the recommendations of the New Jersey Agricultural Experiment Station or equivalent research institution.

For example, home agriculture may include most products encountered in commercial agriculture but generally on a less intensive economic scale.

d. Domesticated Animals. Animals produced or used in agriculture, including for example, (but not limited to) horses, cattle, swine, sheep, goats, poultry, fowl, furbearing animals but excluding household pets.

SOURCE: S.R. 60, "Agricultural Definitions for Local Zoning Ordinances in New Jersey," by J.M. Hunter, Specialist in Agricultural Policy, Cook College, Rutgers University.

2/ "The Nuisance Law in Land-Use Conflicts," by Dr. Donald R. Levi, Texas Real Estate Research Center, College of Agriculture, Texas A & M University, College Station, Texas 77843, Vol. II, 1974, No. 5.

Further Information:
Listed below are those who developed and authorized these guidelines and who may be contacted for further information:
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