

**Common External Parasites  
of Chickens**

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**Parasites**  
An organism that lives off another 

Most animals and humans have them

**Internal and External**

Multi-species hosts or Species - specific

The parasitic relationship is usually good for the parasite detrimental to the host

**Parasites or Symbiotes**

Related to a parasite is a symbiote

An organism that lives with another

The symbiotic relationship is usually good or at worst neutral for both organisms.

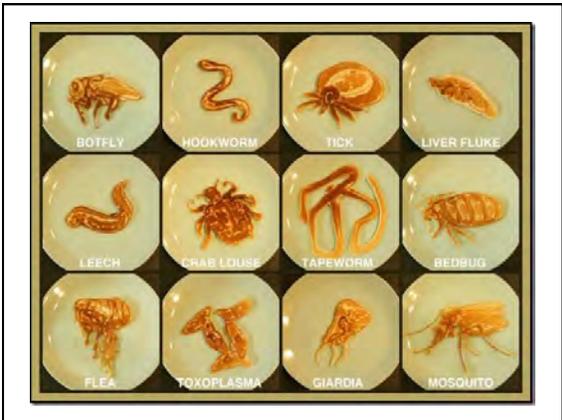
Relationships of organisms of different species

**Symbiosis**

- Neutralism  
No apparent affect on either
- Amensalism  
One harms another with no benefit
- Competition  
Mutual determent
- Commensalism  
Benefit for one without effect to the other
- Mutualism  
Both benefit

**Parasitism**

- Antagonism  
One benefits at the expense of another



**What are the common  
ectoparasites of Poultry?**

Mites 

Lice 

Fleas 

Ticks 

# Mites

## Important Types

Red Mites  
Northern Fowl Mites



## Less Common

Scaly Leg Mites  
Depluming Mites



# Lice

Fluff Louse

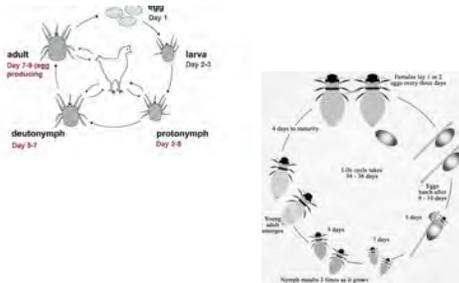


Head Louse



Shaft Louse

# Life Cycles

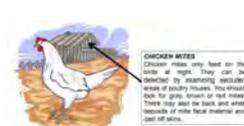


## Chicken mite (*Dermanyssus gallinae*)

Roost Mites, Red Chicken Mite  
Poultry problem Worldwide  
Can feed on Humans

Nocturnal Feeders – Blood Suckers

Do not live on the birds  
Spend days in cracks and crevices of the chicken house



## Chicken mites

Come from wild birds, rodents, other animals

Heavy infestation –  
Reduced production and Fertility  
Listless birds  
Pale combs and wattles  
Reduced wt gain



## Northern fowl mites (*Ornithonyssus sylvarum*)

Most common parasite  
Cooler Temperature  
Blood feeders

Clinical Signs

Anemia  
Loss of production  
Reduced Growth Rate  
Reduced feed intake  
Will bite humans - Itching



**NORTHERN FOWL MITES**  
Look for dark patches in the feathers and on the skin around the vent area. Mites appear as fast-moving, white or dark specks in these areas. They also leave behind a lot of mite fecal material.



Live on the birds – Vent area – Dirty appearance

**Scaly-leg mites** (*Knemidokoptes mutans*)  
 Very small 1/100<sup>th</sup> inch  
 Burrow under leg scales feeding on the soft tissue

Scales appear to erupt from the legs  
 Birds may lose toes

Can live off birds for a while

Treatment – smother mites  
 Cover with oil or petrolatum



SCALY-LEG MITES  
 Mites burrow under scales on lower leg (shanks) and toes causing scales to bulge out. Legs and toes become deformed.

Poultry lice - Biting Lice  
**Chicken body louse** (*Menacanthus stramineus*)  
**Shaft louse** (*Menopon gallinae*)  
 Blood sucking lice – only on mammals  
 Species-specific and cannot survive on humans

Remain on the birds – eggs attached to feathers  
 After hatching the remain for months  
 (survive off birds for only a few days)

Feed on Skin dander, feather dander, scales  
 Will feed on surface blood



CHICKEN BODY LICE  
 Look for small, yellow-brown, cigar-shaped, quick moving insects on skin and feathers on breast and under wings.

Infested birds

Agitated because of the skin irritation  
 Damaged feathers  
 Appear to be in general poor health.  
 reduced feed intake, slowed body growth,  
 decreased fertility, declining egg production.

Do not leave the host bird unless they are moving to another bird



**Sticktight fleas** (*Echidnophaga gallinacea*)

Attach to the skin and wattles on the head of birds

Not species specific –  
 Found on dogs, cats, horses, and humans

Adults are free-living until it is time to breed.  
 Female fleas attach to the skin around the face  
 lay their eggs

4 weeks for an egg to develop into an adult.



STICKTIGHT FLEAS  
 Look for small brown insects that appear as dots clinging to or embedded in the fleshy parts of the chicken's head around the eye.

**Less-Common Parasites**

**Fowl ticks** (*Argas persicus*)  
**Blue bugs** soft tick



Hard ticks are normally found on cats and dogs  
 Adults are about 1/4 inch in length.

Ticks live in the cracks and crevices of a poultry house.

Ticks in various stages of development will feed on a host. Females lay 50 to 100 eggs in poultry house after every blood meal.

**Blue bugs (Ticks)**



Larvae seek out a host  
attach themselves and feed for 4 to 7 days.

Larvae then fall off the host molt to the nymph stage  
Nymphs and adults feed only at night  
15 to 30 minutes

After several nymphal molts, the adult tick emerges  
The time from egg to adult is approximately 30 days

Adult ticks are resistant to starvation  
can live for more than a year without feeding

**Bedbugs (*Cimex lectularius*)**

Nocturnal

Bedbugs crawl onto birds and suck their blood

Bedbugs hide, breed, and lay eggs in the poultry house  
in nests, behind nests, under loose boards, and in cracks

When disturbed, bed bugs give off a distinct odor similar to that of stink bugs



**Treatments**  
Cleaning and Pesticides



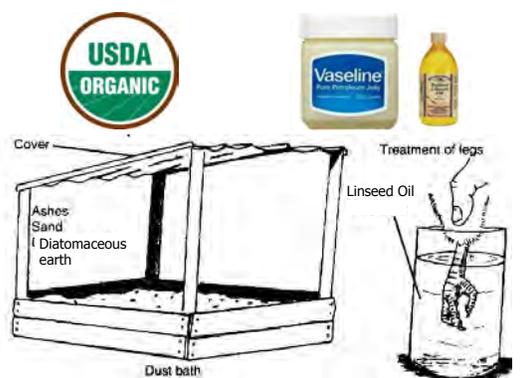
Dusts, Sprays and Strips

Carbamates  
Permethrins  
Mite Strips



Poultry house, especially cracks and crevices, roosts, walls, and ceilings

The birds should also be treated with an insecticide that is approved for poultry. Following label instructions



USDA ORGANIC

Vaseline

Linseed Oil

Cover

Ashes  
Sand  
Diatomaceous earth

Dust bath

Treatment of legs



Spraying your coop and roosts for several days in a row with a mixture of  
2 cups water,  
1 cup cooking oil and  
1 tablespoon dish washing liquid

The coop should be sprayed at least once or twice a week for several weeks in conjunction with treating your hens directly.

**Garlic juice mixture.**  
Poultry scientists in the UK to have a 100% kill rate over 24 hours.

Treatment and preventative

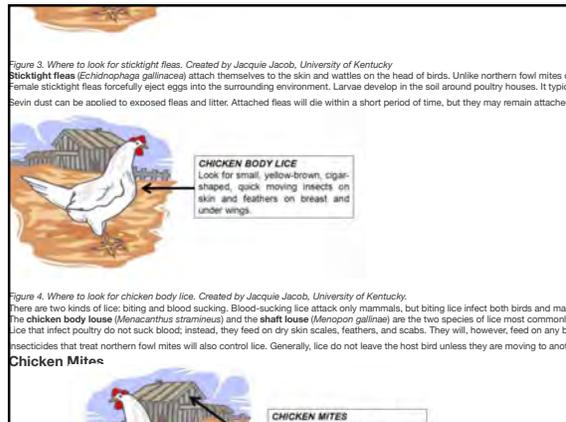
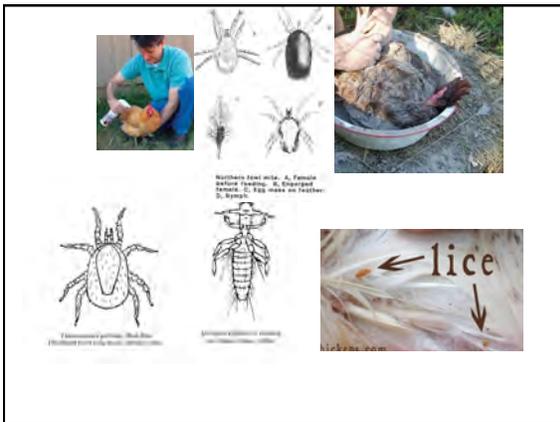
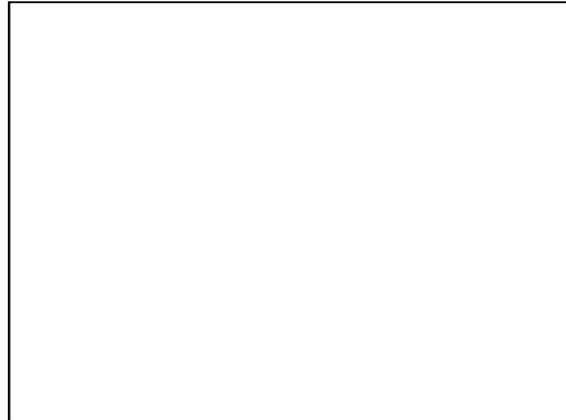
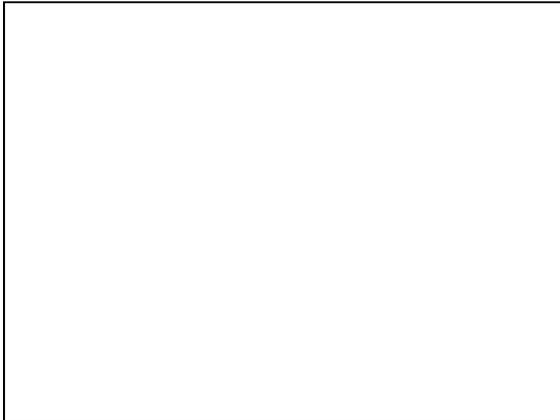
10 ounces of water  
1 ounce of garlic juice  
1 teaspoon (total) any combination of these essential oils - bay, cinnamon, clove, coriander, lavender, spearmint and/ or thyme




Ectoparasites will be a constant problem

Elimination probably not possible

Control will continue to be a constant battle



spots or on closer inspection you may see the speckles move!

In extreme cases, feather loss and signs of dermatitis Whitish-grey 'ash' (mite faeces) around the edges of crevices and in trails along and under perches.

Active red mite on housing which glow in the light of a torch at night.  
(Underneath the roofing felt is a favourite place for mite to hide!)

Hens may avoid a nesting box which is particularly badly infected.

Never assume that red mite are the problem if you can't find any physical signs of them at all – remember, most sick hens display some similar symptoms, whatever the cause!

If in doubt – ask your vet.

The Red Mite Life Cycle.  
Mites feed on the bird under cover of darkness each

