# Pacific Wildlife Project

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# **Mallard Duckling Care Tips**

#### Housing

Ducklings, like chicks, must be raised in a brooder environment with DRY heat. A very basic brooder can be as simple as a large cardboard box with a light bulb suspended overhead for heat. Aquariums, small animal hutches, cages or kennel runs can also be adapted. You will need an enclosure with small bars or closed walls so babies cannot squeeze through to escape and an environment free or protected from chilling drafts. Walls for kennel runs can be devised with plastic sheeting, panels or cardboard. The enclosure must be serviceable for ease of cleaning and feeding, and there should be some area to provide a means of attaching an overhead light for warmth.

Ducklings can be moved to larger quarters about every 10 days

#### Heat

Waterfowl need somewhat less heat than chicks. Recommendations are: first week =  $85^{\circ}$  -  $90^{\circ}$  F ambient temperature. This can be lowered in 5-degree increments each week through the fifth week. After this, they are usually ready to do without supplemental heat. When brown feathers begin to "peek" out at sides, heat sources can be gradually decreased. Heat can be discontinued by the time brown feathers have fully emerged at both sides and wing feathers are in "quills". It is normal that their wings droop down at the sides.

If you don't have a formal brooder, your heat source is usually a light bulb or heat-lamp. "Brooder" light fixtures with wide, aluminum dome tops are ideal as they deflect heat downwards onto the housing environment. Utility lights with aluminum domes and scissor-clamp backs are ideal for attaching to many surfaces. Be careful not to leave fixtures close to combustible surfaces or low enough for the babies to burn themselves. As a rule of thumb, an ideal height for hatchlings is approximately 14" above the floor space with a 75-100 watt incandescent bulb overhead (depending on the temperature of the room where the makeshift brooder is located).

SAFETY NOTES: Remember that bulbs get very hot - be careful that the bedding can't catch fire and be sure to turn off or unplug the fixture when removing the fixture for cage cleaning. Do not set the hot fixture near combustible surfaces.

Water splashed onto hot bulbs will cause the bulb to fracture in pieces and "explode". Be very careful to place the fixture away from water sources and remove as necessary for cleaning.

When using clamp style fixtures secure the clamp with an additional wire or zip tie to prevent accidental detachment.

### **Bedding/flooring**

A slick surface like newspaper is not practical for newly hatched waterfowl. Water will pool on the surface and chicks will become wet with water and feces. Absorbable material likes chux pads (incontinent padding), newspapers covered with paper towels (for absorbency), or open surface rubber cage matting will provide a clean, soft and dry environment for chicks.

#### **Feed and Water**

#### Water

A constant supply of fresh water is necessary for ducklings. For the first week, a chick waterer will work well. Ideally, a waterer with an outside well should be used so babies cannot get into the water. If they have access to the water, they walk in it and leave droppings to soil it. Also, if chicks stay wet, they lose body temperature and are in danger of hypothermia and resulting death. Chick waterers are necessary for hatchling and intermediate chicks. A simple waterer may be devised by placing an upside down bowl or cup in the middle of a water dish to prevent entry into the bowl.

Older chicks can have open top water bowls but they should be of a size to accommodate drinking and deep enough to prevent entry and swimming. Hypothermia will still be a consideration at this age.

If chicks become soiled with feces and food, they may be bathed in warm water pools (a basin) for very short periods as they are unable to thermo regulate, or "waterproof", themselves at this age. After bathing, chicks should be blotted with dry towels and warmed/ dried with cage driers or overhead light bulbs.

Just remember that the nature of waterfowl is to play in the water, and as the surrogate parent, you have to control this for the first few weeks. And be aware that you'll go through lots of soggy cardboard boxes, even with the best watering situations.

NOTE: ducklings swim immediately after hatch when they are with mother. This is possible because the mother produces oils secreted from her oil preen gland (at the base of the rump). As the chicks rub against her and sit underneath her body, the oils from her body coat the chicks and

form a waterproof barrier for their delicate down. This oil gets reapplied after each swim when babies retreat under mother's body. Their own oil preen gland is not developed until they reach their juvenile stage and have most of their brown body feathers emerged. At this point, they can be free to swim - as they will preen and coat their feathers for waterproofing. At this stage, they will be near release age (approx. 5 weeks).

It should also be noted that since proper waterproofing is not available during growth stages, chicks tend to lose feathers because of food and feces that stick to them. Some chicks will lose body feathers if food is allowed to stay on the feathers long enough for other chicks to eat the food (and feathers) off their cage-mates backs! Chicks should be kept as clean as possible but even in the best of circumstances, some feather loss and soiling can be expected.

#### Feed

Waterfowl often fill their mouths with feed and then hurry to the waterer to get a big drink and wash it down. Therefore, you don't want the water too far from the feeder, or they'll drop all the feed on their way there. Also, you don't want it too close as you want to prevent the feed from getting too wet and developing molds (which can kill). Try to set your feeder up in a way that the youngsters can't climb into it, either. Change food daily and keep it dry.

Feed should be available at all times along with a water source. Appropriate formulas for developing chicks are called "starter" or "Gro" formulas, depending on the manufacturer. This formula has a higher protein and calcium to support growing chicks. The "mash" formula and "crumble" formula made for chicks is nutritionally identical, and either can be used. For practical purposes, the crumble is a better choice as it stays drier, does not pack down (making it difficult for a hatchling to eat), and tends to be less messy.

NOTE: babies do not eat the first day after hatch. They are still are absorbing abdominal yolk sac that nourished them during incubation. They will eat the second day or so post hatching after watching mother eat. They will emulate her feeding behavior. Some new clutches of chicks will not eat on their own if they have not seen this feeding behavior and will starve. For this reason, it is a good idea to select a chick that is eating from another clutch to tutor the new chicks. The tutor chick can be larger as long as it is not so large that it bullies the small babies. This tutor chick will usually be regarded as the mother and chicks will want to huddle to it. Different sized chicks can usually be housed together as long as there is not a great disparity in sizes.

#### Recommendations:

**Hatchlings** and new admissions can be conveniently housed in small boxes or aquariums. These are simple to isolate clutches of ducks, separate by size, and they are convenient to clean and contain babies. Lights should be over head-approx. 14-16" overhead and 75-100 watt. Hatchlings respond well to a feather duster "Mom". Hang a duck feather duster so it is suspended about 1" – 2" above the floor. Babies will huddle under it for safety and warmth. Ideal placement for the duster is on the end of the brooder where the light (heat) is. Do not hang the duster near the food or water. The babies will stand in those bowls to be under the duster and become wet and soiled.

SAFETY NOTE: Place light fixtures carefully on plastic topped or framed aquariums / terrariums.

**Intermediates** are still downy but larger chicks. As ducklings grow larger (every 10 days or so), they can be transitioned to larger enclosures with less heat. Easy intermediate housing can be wire caging with light fixture overhead.

**Older downy chicks** can be moved to runs or large enclosures with a light source in only one corner of the cage. Chicks will gather near or away from the heat source as they wish. At this stage, many will stay away from the light and be more independent.

**Juvenile chicks** may be kept in cages or runs without heat sources when they are showing permanent brown feathers growing on their sides.

## **Family Dynamics**

Adult mallard pairs mate for life. They are generally monogamous and will "pine" over the loss of a mate. Frequently, the survivor of a killed mallard pair can be found at the site the mate was last seen, waiting for its return. During nesting season, the pair travels together until a suitable nest site is found. Copulation usually takes place in water. For this reason, common nesting sites are at or near lakes, swimming pools, fountains and other similar water sources. Mallard females are uniquely possessed of camouflage coloring, so her presence is commonly unnoticed while she is nesting. She will lay one egg per day and commence incubation when her clutch is complete (her decision). Clutches can be small (3-4 eggs) or large (12-20 eggs) at the whim of the hen. Food supply and nesting opportunity will be a significant factor in determining clutch size. Incubation is approximately 28-30 days. During this time, the male will stay some distance away from the nesting process and protect the female from intruding (unpaired) male mallards who will attempt to breed with the unaccompanied female. He will also tend to stay at a distance while the female is with the chicks. He will continue to chase rogue male ducks away from his mate and babies. Mom stays with her chicks until they fledge, during which time she is fiercely protective of them. She will not usually leave her babies to protect herself. Mom will usually leave the nest site one or two days post hatch to seek a new location to live with her chicks. All are vulnerable at this stage and are frequent victims of car collisions or accidental rescues by well meaning citizens. After mom settles on her home, the male will generally rejoin the family sometime after this relocation. Although there is always risk of harm during this move process, it is best to leave intact mallard families alone to find new lodging after hatch.