Checklist for Fly Control on Dairy Operations

Fly control on dairy operations is important due to the risk of disease transfer causing such problems as mastitis and increased food safety concerns. Large fly populations can also generate nuisance complaints from neighbours. Dairies provide ample food sources for flies and many habitats suitable for breeding and development. Therefore, the potential for generating large populations is very likely on dairy operations.

Dairy operators can prevent fly outbreaks by implementing a fly management program that includes monitoring the population and a regular cleaning schedule of areas typical as fly breeding habitat. Fly populations are a mix of various lifecycle stages (egg, larva, pupa, adult). Therefore, control methods should be conducted regularly, preferably weekly, to effectively disrupt the fly lifecycle and prevent fly outbreaks. Sanitation and good manure management are key to controlling flies on dairy operations. Operators should pay particular attention to calf pens and hutches because they are often major fly breeding areas. Calves are too small to effectively compact bedding and manure and calf pens or hutches are frequently overlooked or missed during regular cleaning of barns and alleyways.

Utilizing other methods in conjunction with sanitation practices can be useful in controlling the adult portion of the population. Large rolls of sticky tape can be used in barns to attract and capture adults and fly bait stations can be useful around calf pens and hutches. If or when insecticides are used, animals should be removed from the area prior to application and all label instructions strictly followed. Remember that these chemicals will just affect the adult portion of the population and control of the population will only be short-term. Removal of fly breeding habitat is the key to effectively reducing fly populations.

Having a written fly management plan and communicating with your neighbours during the summer months about the actions you are taking to reduce fly populations on your operation will help avoid potential nuisance complaints. Taking a proactive approach to fly control is your best defence.

The following checklist is a tool for you to use in monitoring fly populations and in routine maintenance of key fly breeding habitats on your operation. Please feel free to photocopy and use the checklist as part of your fly management program to:

- identify sites where flies are breeding on your operation,
- locate the potential source of a nuisance fly outbreak, or
- use a weekly cleanup and maintenance checklist during the summer months to ensure the effective control of fly populations on your operation.

Remember to keep these checklists as part of your records to confirm the action you have taken to control fly populations on your operation.

For more information regarding fly monitoring and control options, refer to the Alberta Agriculture and Rural Development publication, 'A Guide for the Control of Flies in Alberta Confined Feeding Operations'.

Fly Monitoring

Potential fly breeding areas: Manure

- ❑ calf pens and hutches, particularly in corners and areas under feed and water
- ❑ areas under fences and in corners of loafing area
- ❑ under and around all feed bunkers and waterers
- ❑ stanchion and tie stall barns – under feed bunkers and waterers, in corners and gutters, around poles
- ❑ hard to reach areas under stall and fence panels
- ❑ loading areas for manure hauling and application equipment
- ❑ floating mats in open liquid manure storage facilities
- ❑ around the moist edges of solid manure storage areas and bedding piles

Potential fly breeding areas: Feed

- ❑ silage effluent or spilled silage – front and sides of horizontal silage silos and piles or the base of tower silos
- ❑ around and beneath stored hay bales, particularly where hay bales contact the soil
- ❑ old leftover feed in bunkers
- ❑ spilled feed around feed bins and under augers
- ❑ built up feed from spillage and over-filling on the top of storage bins

Potential fly breeding areas: Other

- ❑ old dirty bedding in maternity stalls
- ❑ runoff areas from barns and barn yard
- ❑ longstanding puddles of spilled milk or parlour wastewater

Recommended Control Methods:

- ❑ clean out maternity stalls, calf pens and hutches frequently
- ❑ move calf hutches frequently
- ❑ provide curbs and concrete surface in loafing area to aid cleaning
- ❑ clean stanchions and gutters frequently
- ❑ scrape and clean loafing area frequently
- ❑ frequently flush manure pit under slatted floors
- ❑ enclose area under feed bunkers
- ❑ provide concrete apron around feed bunkers and waterers
- ❑ clean up spilled feed weekly
- ❑ provide shelters over outdoor feed bunks to prevent excessive moisture from rain and feed wastage
- ❑ cover and store hay bales on dry land or raised pallets, or store hay in properly designed stack yards or hay sheds
- ❑ minimize seepage from silage storage by covering and sealing edges of bagged silage and silage piles and cleaning around the base of tower silos
- ❑ divert surface water by grading and providing drainage around barns and facilities
- ❑ keep lagoon free of debris and floating solids and do not overload
- ❑ screen windows of milking parlour
- ❑ keep vegetation around the operation mowed short

Additional Control Options:

- ❑ indoor and outdoor fly bait stations
- ❑ indoor fly sticky traps
- ❑ residual insecticide spray on adjacent vegetation and buildings
- ❑ misting for adult fly control as needed*
- ❑ treatment with larvicides†

* It is important to follow all label directions for product use to ensure personal safety, the safety of others and the safety of livestock.
† Check with your local retailer regarding product options and product registration for use in Canada.