



AMSCOPE

Newsletter of the **AMERICAN MINIATURE SCHNAUZER CLUB**
Member of the American Kennel Club

January 2008

Volume CB15,

Issue 1

SPECIALTY WINS

Michigan MSC
9-28-07

Sweepstakes (4,5)
Judge: **Sonny Lelle**

Best in Sweeps...Regency's McKenna Kan/Haney
BOS in Sweeps...Markworth Whistle-Jacket/Marks

Regular Classes (9,16,4,0)
Judge: **Margo Klingler**

WD/BOW ...Regency's Good To Go/Walton/Weirick/
Verna
RWD...Markworth Whistle-Jacket/Marks
WB/BOS...Char N Co My Brown Eyed Girl/Stukey
RWB...Jacqueminot Jannell/Coffmann.
BOB...Ch. Wards Creek's Nightly Business/
Schnetzer
BBBE...Char N Co Boop-Opp-a-Doop/Stukey/
Garmaker

MSC of Southern CA

Sweepstakes (3,1)
Judge: **Bolivia Powell**

Best in Sweeps...Kwic Twisted Mr. Wonderful/
Colby
BOS in Sweeps...Regency's Hoochie Coochie
Rose/Verna/Jasso/Crowe

Regular Classes (5-11-8)
Judge: **Phyllis Wolfish**

WD ...Major Impact of Hansenhaus/Baws
RWD...Dart Maul De Miguel/De Miguel
WB/BOW... Diamonds R4Ever N Always/Dodge
RWB...Augustas Tyra Barks/ Arendt
BOS...Ch. Emerald Isle Will O The Wisp/O'Brien
BOB...Ch. Carmel Race To Kelpercrest/Potiker

Table of Contents

Black Ribbons	10
Bouquets and Biscuits	10
Canine Rabies Challenge Study Begins	10
Eukaneuba Invitational	10
Meanwhile at the Shows	10
MSC of Atlanta Specialty	3
President's Message	8
Specialty Wins	1
The Point of Acupuncture	9
Terriers Only Performance Summit	9
What Everybody Needs to know ...	1

Inserts: Ads

What Everyone Needs to Know About Canine Vaccines and Vaccination Programs

Ron Schultz, PhD; University of Wisconsin - Madison
from the 2007 National Parent Club Canine Health Conference* October 21, 2007

For many veterinary practitioners canine vaccination programs have been "practice management tools" rather than medical procedures. Thus, it is not surprising that attempts to change the vaccines and vaccination programs based on scientific information have created great controversy and unique methods of resistance to the proposed changes have been and are being developed. For some practitioners the issues are not duration of immunity for the vaccines, nor which vaccines are needed for the pet, instead it is felt that every licensed vaccine should be given to every pet on an annual or more often basis. Ironically this is fostered by the fact that multivalent products with 7 or more vaccine components can be purchased for the same price or less than a product with one or two vaccine components. A "more is better" philosophy prevails with regard to pet vaccines. On many occasions practitioners say that "I know many of the vaccines I administer probably aren't needed but it won't hurt to give them and who knows the animal may need them some time during their life because of unknown risk." I have also been told by many practitioners that "I believe the duration of immunity for some vaccines like distemper, parvovirus and hepatitis is many years, but until I find another way to get the client into my office on a regular basis I'm going to keep recommending vaccines annually." Annual vaccination has been and remains the single most important reason why most pet owners bring their pets for an annual or more often "wellness visit." The importance of these visits for the health of the pet is exceptional. Therefore, dog owners must understand the vaccines are not the reason why their dog needs an annual wellness visit. Another reason for the reluctance to change current vaccination programs is many practitioners really don't understand the principles of vaccinal immunity. A significant number of practitioners believe:

2) that they are legally required to vaccinate annually and if they don't they will not be covered by AVMA liability insurance if the animal develops a vaccine preventable disease - Not True. Furthermore, certain companies will not provide assistance if practitioners don't vaccinate annually with core vaccines. Not True - In fact most of the companies have now demonstrated their core products provide at least 3 years of immunity.

3) that not revaccinating will cause the animal to become susceptible soon (days or a few weeks) after the one year. - Not True

4) if the animal is not revaccinated at or before one year the "whole vaccination program needs to be started again". - Not True

5) if they don't continue to revaccinate annually, diseases like canine distemper, canine parvovirus and infectious canine hepatitis (CAV-1) will "reappear and cause widespread disease similar to what was seen prior to the development of vaccines for these diseases." - Not True

6) that if the revaccination "doesn't help, it won't hurt." - Not True

7) that giving a vaccine annually that has a duration of immunity of 3 or more years provides much better immunity than if the product is given only once during the three years. - Not True In fact, there are regional/state rabies programs that suggest annual rabies vaccination programs provide better protection than revaccination once every three years regardless of whether a 1 year or 3 year rabies product is used. - Not True

8) that parvovirus vaccines only provide six months of immunity, thus they must give them semi-annually and the CPV-2 vaccines need to be given with coronavirus vaccine to prevent enteritis. - Not True

1) the annual revaccination recommendation on the vaccine label is evidence the product provides immunity for (only) one year. - Not True

9) "It's much cheaper to revaccinate the pet

continued on p. 2, col. 2...**VACCINES**

LOOK

Please let me know if you
make a change.

*DECALS & PINS. You can get AMSC
decals (\$1.00) and Replacement pins
(\$7.50) from:

Mary Ann Shandor
2302 Cumberland Court, SW
Decatur, AL 35602
256-351-6942
tuckarry@aol.com

*LOCAL CLUBS...please be sure to in-
clude *all* information when sending
Specialty tear sheets for inclusion in
AMSCOPE e.g. Judges, dates, entry,
obedience.

* LOCAL CLUBS...send a copy of your
newsletter to the following members
of the Local Club Bulletin Committee:

Vicki Kubic
513 River Terrace
Endicott, NY 13760
Bits513@aol.com

Chris Kemper
1330 Marbon Road
Jacksonville, FL 32223-3228
shangriladogs@comcast.net

Miguel Orozco
4630 Ella Blvd
Houston, TX 77018
miguel@miguelos.com

AND to: Carla Borrelli (cborr@aol.com)
1799 South Creek Road
Derby, NY 14047

*E-MAIL...If you would like to send your
wins to AMSCOPE via E-MAIL, use the fol-
lowing address:

CBORR@AOL.COM

The deadline
for the
February issue
is January 20th.

VACCINES...continued from p. 1, column 3

sorry" philosophy - It is less expensive to pre-
vent disease. However, if the core vaccines
are given as a puppy and again at a year of age,
then annual vaccination is not needed. Fur-
thermore, if a vaccine is given that is not needed
and it causes an adverse reaction that is unac-
ceptable and very expensive.

10) they need to revaccinate all new dogs/cats
coming to their clinic irrespective of vaccination
history even when vaccination records are avail-
able from another clinic. Presumably the "other
clinic" used the wrong vaccine or didn't know
how to vaccinate. - Not True

11) "Dogs need to be revaccinated annually up
to 5 to 7 years of age, then and only then would
vaccination every three years be okay." - Not
True

12) "Surgical procedures, including anesthe-
sia, are immunosuppressive thus dogs should
be vaccinated prior to or shortly after surgery." -
Not True

13) "Because boarding kennels require annual
or more often (kennel cough every 3 to 6
months) vaccination, practitioners must con-
tinue vaccinating annually with all vaccines." -
Not True - help change the kennel rules through
education and just use the vaccines that need
to be given (eg Kennel Cough.)

Note: There are kennels that require every li-
censed vaccine and the vaccines must have
been given within 1 year or less prior to admis-
sion - help change these rules! Those ken-
nels that are members of the American Kennel
Association should be following the AAHA
Guidelines, but many kennels do not belong to
this association.

It will be necessary to correct many of these
and additional misunderstandings by provid-
ing education to veterinary practitioners, ken-
nel owners and pet owners before significant
changes in vaccination programs can or will
occur to reduce the over-vaccination of both
cats and dogs. However it is equally important
that we don't, in our efforts to prevent over-
vaccination, fail to vaccinate often enough,
fail to vaccinate all or as many pups with the
core vaccines, fail to use products that are
necessary, or to use products that don't pro-
vide protection in our pets.

I believe every practitioner, kennel owner
and dog owner should know the following
general information about canine vaccines and
vaccination programs. **What vaccines are
needed for all puppies?** I do mean all pups,
as we only vaccinate 50% of dogs. If we could
increase this percentage to 75%, we would be
able to eliminate many of the diseases pre-
vented by core vaccines. The "core vaccines,"
those that every pup should receive and iden-
tified as core

by most canine vaccine experts in the United
States, include: 1) Canine Parvovirus type 2
(CPV-2), 2) Canine Distemper virus (CDV), 3)
Canine Adenovirus type 2 (CAV-2), 4) Rabies
Virus (RV). **When do the core vaccines need
to be given?** As a minimum, puppies should
be given at least one dose at 16 weeks of age
or older. Preferably, they should be given three
or more times starting at 6 to 9 weeks then at
an interval of 2 to 4 weeks revaccinate 9 to 12
weeks then again at 14 to 16 weeks. It is
critical that the last dose be given at 14 to 16
or more weeks of age. It is important not to
give them earlier than 6 weeks unless there is
a significant risk of a specific disease, then
give only the vaccine for the disease you want
to prevent (e.g. CPV-2). Never vaccinate a
pup less than 4 weeks of age. The most ef-
fective canine core products currently include
modified live and recombinant vaccines alone
or in combination. The combination products
with CPV-2, CDV and CAV-2 currently often
include canine parainfluenza (CPI) virus. New
"core only" products have been and are being
developed that don't have CPI, however, the
CPI will not cause a problem if and when used
as a parenteral 5 way combination product.

After the puppy series is completed, revacci-
nation is recommended again at one year of
age or one year after the last puppy vaccina-
tion. Rabies must be given again at 1 year,
then every 3 years, whereas, the other core
vaccines need not be given again for at least
3 or more years. There is no benefit from
annual rabies vaccination and most one year
rabies products are similar or identical to the
3-year products with regard to duration of im-
munity and effectiveness. However, if they
are 1 year rabies vaccines, they must be le-
gally given annually! Rabies vaccine is the
only canine vaccine requiring a minimum du-
ration of immunity study. However, revacci-
nation annually does not necessarily improve
immunity. However, annual vaccination does
significantly increase the risk for an adverse
reaction in the dog. I would recommend, if
you really want to be sure the puppy vaccina-
tion program was successful, that a CDV and
CPV-2 antibody titer be performed 2 or more
weeks after the last puppy vaccination. Labo-
ratory tests as well as "in-office test" for
CDV and CPV-2 tests are available. If there is
no antibody, revaccinate and perform a test
two or more weeks after revaccination. If you
still don't have antibody, change the product
and vaccinate again. Antibody tests (titers)
are very useful at these times to ensure the
animal is immunized. The problem with anti-
body tests is they are very expensive, thus in
general, these tests won't be used. As an
alternative to revaccinating at one year for
CDV, CPV-2 and CAV-2, I would revaccinate
at 6 months to ensure the animal has respon-
ded rather than waiting until 1 year. Then, revacci-

cont'd on p. 3, column 1...VACCINES

VACCINES...continued from p. 2, column 3

nate not more often than every 3 years. The minimum duration of immunity for the core vaccines except rabies is at least 7 years based on challenge and/or titers (Table 1). Thus revaccinating annually will not improve protection. Ironically “the better safe than sorry philosophy” can be equally applied to less vaccination, since the animal that develops an adverse reaction (e.g. hives, facial edema, anaphylaxis) from a vaccine that wasn’t needed is an example of “being sorry, not safe!”

What about all the other vaccines currently available for the dog? They are non-core or optional vaccines that should only be given to animals that need them and only as often as needed. There are also some vaccines that are not recommended for any dogs. The duration of immunity is not known for certain non-core products, the efficacy is limited or not known and the risk vs. benefit factors are not always well established nor understood. The minimum duration of immunity for *Leptospira* vaccines is probably less than one year, thus if required for a high risk dog, they may need to be given as often as semi-annually. Considering the low efficacy, the adverse event rate and the minimal risk for leptospirosis in many regions of the US, certain practitioners are not using the current products. However if an animal is in a high-risk environment for leptospirosis, the product to use should contain the 4 serovars (there is no significant cross protection among the 4 current serovars) and the animal should be vaccinated starting not earlier than 12 weeks of age, revaccinate in 2 to 4 weeks, revaccinate at 6 months of age, revaccinate at a year of age and then you may have to revaccinate as often as every 6 to 9 months for optimal protection. Using this program the animal should not develop clinical disease but it can get infected and shed organisms in its urine. *Bordetella* immunity may be less than one year and the efficacy for the products is not well established. Many animals receive “kennel cough” vaccines that include *Bordetella* and CPI and/or CAV-2 every 6 to 9 months without evidence that this frequency of vaccination is necessary or beneficial. In contrast, other dogs are never vaccinated for kennel cough and disease is not seen. CPI immunity lasts at least 3 years when given intranasally, and CAV-2 immunity lasts a minimum of 7 years parenterally for CAV-1. These two viruses in combination with *Bordetella bronchiseptica* are the agents most often associated with kennel cough, however, other factors play an important role in disease (e.g. stress, dust, humidity, molds, mycoplasma, etc.), thus kennel cough is not a vaccine preventable disease because of the complex factors associated with this disease. Furthermore, this is often a mild to moderate self limiting disease. I refer to it as the “Canine Cold.” My preference when a kennel cough vaccine is used is that it should be the intra-

nasal rather than the parenteral, but some dogs will not allow someone to administer the vaccine intranasally.

There is a new virus of dogs, an “equine-like influenza virus,” that first infected greyhounds in Florida in 2004 that caused respiratory disease. At this time it is not known whether this virus, referred to as canine influenza virus (CIV), is an important cause of canine respiratory disease, nor if it will be an emerging disease of dogs. Questions about the role of influenza virus or for that matter, viruses other than CPI and CAV-2, bacteria other than *Bordetella bronchiseptica*, various mycoplasmas and other factors causing kennel cough, which I refer to as “Canine Respiratory Disease Complex,” exist and must be answered.

The geographic distribution of Lyme disease would suggest vaccination would only be of benefit in certain regions of the US, thus widespread use of this product is neither necessary nor desired. Although Wisconsin is an endemic area for Lyme disease, we have used very few doses of Lyme vaccines in our VMTH and we have not seen significant numbers of cases of Lyme disease. However in certain areas of western and northwestern Wisconsin and eastern Minnesota, many cases of confirmed Lyme disease are seen in both vaccinated and unvaccinated dogs. Tick control for prevention and antibiotics for treatment must be used in high risk areas. Immunity to Lyme vaccines have been shown experimentally to last up to one year. *Giardia* is a new vaccine that may be of value in certain circumstances, but there have not been adequate field studies to demonstrate the need nor the benefit of this vaccine. To date no one has demonstrated a benefit for coronavirus vaccine. In the vaccination guidelines from the American Animal Hospital Association, neither *Giardia* nor Coronavirus vaccines are recommended unless they can be proven to be beneficial for a specific animal. There are also new vaccines for snakebites (*Crotalus* sp.) and for periodontal disease (*Porphyrius* sp.) and a therapeutic vaccine for treatment of canine melanomas.

At present most canine core vaccines are given more often than needed, but a few non-core

**THE MSC OF ATLANTA
ANNUAL BANQUET & CELEBRATION**
APRIL 12, 2008 at 7 p.m.
Specialty on April 13, 2008

Please join us on the plantation house veranda at Henderson Village, a luxury retreat just outside Perry, Georgia, for an evening of Southern hospitality, elegant service and cuisine that’s among the best the mid-state region has to offer. Arrive early, explore the historic setting and extensive grounds. Enjoy a no-host bar. \$40 per person. Tables of eight may be reserved. Due to the popularity of Henderson Village, payment or confirmation received no later than Friday, April 4. Send checks payable to MSCA to

Gayle Deimel, Treasurer, MSCA
4467 Windsor Oaks Circle
Marietta, GA 30066

vaccines probably not often enough to be of benefit. Also, many vaccines are given that are not needed or that cannot be shown to provide a benefit for the specific animal. Vaccines are medical products that should only be given if needed and only as often as is necessary to provide protection from diseases that are a risk to the health of the animal. If a vaccine that is not necessary causes an adverse reaction that would be considered an unacceptable medical procedure, thus use only those vaccines that are needed and use them only as often as needed. Vaccination programs are changing and they will continue to change. The vaccination program must be tailored to the individual animal. Vaccines are medical products that should not be used as practice management tools. My general philosophy is to vaccinate more animals in the population, but vaccinate with only those vaccines that the animal needs and only as often as required to maintain protective immunity. For some products vaccination may occur once or twice in a life time, whereas for other products it may be every 6 to 9 months.

Be wise and immunize, but immunize wisely!

Table 1: Minimum Duration of Immunity for Canine Vaccines

Vaccine	Minimum Duration of Immunity	Methods Used to Determine Immunity
CORE VACCINES		
Canine Distemper Virus (CDV)		
Rock born Strain	7 yrs/15 yrs	challenge/serology
Onderstepoort Strain	5 yrs/9 yrs	challenge/serology
Canarypox Vectored rCDV	3 yrs/4 yrs	challenge/serology
Canine Adenovirus-2 (CAV-2)	7 yrs/9 yrs	challenge-CAV-1/serology
Canine Parvovirus-2 (CPV-2)	7 yrs/10 yrs	challenge/serology
Canine Rabies	3 yrs/5 yrs	challenge/serology

VACCINES...continued from p. 3, column 3

Why Vaccination Programs are Changing

Why, when you know from personal experience that life-long immunity exists for many human vaccines, do you have great difficulty believing a canine vaccine can provide life-long immunity? Perhaps I and my colleagues that teach immunology to veterinary medical students have failed to explain the basics of vaccine induced "immunologic memory." Immunologic memory is as the term implies the immune system's ability to remember the vaccine antigens that it has seen at an earlier time in life, allowing the immune system to respond in a manner that will protect you or your dog from specific infections and/or diseases.(1,2)

Immunologic memory is responsible for the duration of immunity that develops after recovery from natural infection/disease and after vaccination with modified live virus (MLV) or killed virus (KV) vaccines. Similarly bacterial infections and vaccines or bacterins (killed bacterial vaccines) provide immunologic memory. However, in general, immunologic memory to killed viral vaccines and to bacterial vaccines (or bacterins) is not as long lived as it is to MLV vaccines. The duration of immunity or length of immunologic memory varies among the agents causing the diseases. For example, our immunologic memory for measles virus is life-long. How do we know that it is lifelong? No one has published any controlled studies, but we know after recovering from measles infection and/or vaccination with a MLV vaccine, immunity is life-long because people rarely get measles even though they rarely receive another dose of vaccine. In contrast to the MLV vaccine, the killed measles vaccines that were used for a short period of time about 25 years ago failed to give life-long immunity. Many individuals receiving killed vaccines were either inadvertently infected or had to be revaccinated with a MLV when they were 15 to 20 years of age to provide life long immunity. How many people do you know that were vaccinated with the modified live measles virus product, in use for approximately 40 years, or that had measles as a child, then developed measles later in their life? I'm sure your answer must be very few or none!

A very similar story to measles can be told for canine distemper virus (CDV) in the dog. CDV is in the same virus family as measles virus and it shares many similarities with MV. As you may know, MV vaccines have been and were available until recently for dogs to prevent disease (not infection) caused by CDV. Those of you over the age of 50, may remember canine distemper when it was a devastating disease killing many animals with more than 50% of infected puppies often dying from the disease. If you are old enough, were observant enough and had an opportunity to fol-

low dogs that recovered from natural infection with CDV you know that dogs recovering from CDV, like their human counterpart recovering from measles, rarely, if ever, developed acute distemper during the rest of life, even when not revaccinated. Like measles immunity in humans, immunity from canine distemper infection confers immunologic memory resulting in life-long immunity. How do I and my older, wiser and now retired colleagues and canine infectious disease experts, Dr. Max Appel, Dr. L.E. (Skip) Carmichael, and Dr. Larry Swango know that distemper immunity is life long? We know because we had the opportunity to follow dogs that recovered from infection with CDV or puppies that were vaccinated once or twice with MLV CDV and lived for 7 or more years and never developed disease even though they were exposed to CDV via natural outbreaks or experimental challenge with CDV. We also know the vaccinated or recovered dogs had life long immunity because we and others performed antibody titer tests for years on the dogs after they recovered from infection or after puppy vaccination. These dogs all had titers showing that immunologic memory was present. Most of the dogs had titers that provide sterile immunity (protection from infection) much like the measles titers found years later in many vaccinated or naturally infected people. However even if the dogs didn't have sterile immunity but still had antibody, they had immunologic memory. An antibody titer no matter how low shows the animal has immunologic memory since memory effector B cells must be present to produce that antibody. Some dogs without antibody are protected from disease because they have T cell memory, that will provide cell mediated immunity (CMI). CMI will not protect from reinfection, but it will prevent disease. When an animal is antibody negative it may have T cell immunologic memory, but I generally consider a CDV antibody negative dog not to be protected, therefore, I recommend revaccination!. Some researchers, including myself, have had the opportunity to follow the duration of immunity for dogs living in natural or experimental environments that are free of CDV and CPV-2 (6). Why is it important that observations are made on dogs and cats that are not exposed to the virus? Because in those environments it is possible to demonstrate that immunologic memory is independent of natural or overt stimulation with the wild type virus or the vaccine virus. However, in a normal environment where infection occurs, "natural vaccination" or exposure and infection with the specific agent can and does occur at least for certain agents and in certain animals, but the infected animals do not get sick. Ironically when animals have "sterile immunity" their immune system is rarely boosted by natural exposure since infection does not occur. If infection does not occur, there is no stimulation of the specific memory T or B cells, thus the antibody titer does not

increase. A severe outbreak of CPV-2 occurred in a large commercial breeding kennel, where more than 90% of puppies got sick and 50% of puppies from 4 weeks to 24 weeks of age died. However, none of more than 50 dams with sick and dying puppies had a significant increase in antibody titer, none had virus in their feces and none showed clinical signs of CPV-2 disease, all excellent indicators the dams had sterile immunity (did not get infected)!

Is immunologic memory and duration of immunity to all human viruses life-long? The answer is NO! Natural infection with many human viruses and the vaccines for those viruses provide life-long immunity (e.g. measles, mumps, rubella), whereas other viruses and/or the vaccines for them provide short duration of immunity (e.g. human cold viruses, influenza virus) and for additional viruses there is no immunity from infection or experimental vaccines (e.g. HIV).

The three most important viral infections of dogs all provide life-long immunity, they are CDV, CPV-2, and CAV-1. If a puppy is immunized with the three MLV vaccines used to prevent these diseases, there is every reason to believe the vaccinated animal will have up to life-long immunity! The vaccines that prevent the diseases caused by these 3 viruses plus rabies vaccine are the "Canine Core Vaccines" or those vaccines that every puppy should receive. My own dogs, those of my children and grandchildren are vaccinated with MLV CDV, CPV-2, CPI, and CAV-2 vaccines once as puppies after the age of 12 weeks. An antibody titer is performed two or more weeks later and if found positive our dogs are never again vaccinated. I have used this vaccination program with modifications (CAV-2 replaced CAV-1 vaccines in 1970's and CPV-2 vaccines were first used in 1980) since 1974! I have never had one of our dogs develop CDV, CAV-1 or CPV-2 even though they have had exposure to many dogs, wildlife and to virulent CPV-2 virus. You may say that I have been lucky, but it is not luck that protects my dogs, it is immunologic memory.

An important factor contributing to life long immunity in addition to the memory T and B cells and the "memory effector B cells" (long lived plasma cells) of the specific (adaptive) immune system is the innate immune resistance associated with age. It is well known in all species that the young animal is more susceptible to infection and disease than a mature animal. In the case of human infections that period of increased susceptibility is often the first few years of life, and especially the first year. In the puppy and the kitten it is often the first 3 to 6 months of life, but it can be up to 1 year of age that the animal is more susceptible to disease. For example, dogs less than a year of age are much more likely to develop

cont'd on p. 5, column 1...**VACCINES**

VACCINES...continued from p. 4, column 3

severe parvoviral disease than susceptible (immunologically naïve) dogs over one year of age even though at both ages the animals are very susceptible to infection with CPV-2. Similarly a susceptible cat less than one year of age and especially cats less than 3 months of age are at much greater risk of becoming persistently infected with feline leukemia virus than a susceptible cat that is greater than one year of age at the time of infection. Thus innate as well as specific immune factors contribute to age-related resistance and these factors are highly complex and not completely understood. However, age related resistance plays a critical role in life-long or long term immunity. This does not imply that older dogs and cats cannot get infected and develop disease, it is that they are much less likely to get disease when compared to the younger animal.

I and my colleague, Dr. Fred Scott, first proposed a three year revaccination program for dogs and cats more than 25 years ago, when we published an article in *Veterinary Clinics of North America* 8(4) 755-768, 1978. Today, a three year revaccination program has been recommended in the AAHA Canine Vaccination Guidelines and the American Association of Feline Practitioners Vaccine Guidelines for Cats. The proposed change for revaccination with "Core Vaccines" from annual to triennial revaccination has been very controversial for many reasons, however, the reasons have little or nothing to do with "immunologic memory" or duration of immunity. No one has nor can anyone in the future, show that there is any immunologic benefit from annual revaccination with MLV CDV, CAV or CPV-2. In fact, it may even be difficult to show an immunologic benefit for revaccination at three year intervals since most animals have long term immunity for CDV, CAV-1 and CPV-2. Some among you are probably convinced that there is life long immunity to certain vaccines used in dogs and cats, but few of you after many years of performing annual revaccination are willing to take the risk, however small it may be, to adopt the puppy vaccination program. However, you should feel confident that adopting, a three year revaccination program for CDV, CAV and CPV-2, will not increase the risk for diseases caused by these 3 viruses, just as a once every three year revaccination, rather than annual revaccination, with the killed rabies vaccines does not increase the animal's risk for rabies.

You and your veterinarian will need to determine what vaccines and vaccination program is best for your pet and their patient respectively. The program selected may only include core vaccines that are given once in the lifetime of the dog or the program may include all vaccines with revaccination on an annual or more often basis, or it may be a vaccination program in between these two extremes de-

pending on what your pet's needs are and what, in the medical judgment of your veterinarian, is best for their patients. Furthermore, it is likely your decision depend on the life style of your pet, its medical history, health status, age, pregnancy status and other important factors.

FREQUENTLY ASKED QUESTIONS (FAQ)

1. Is there a risk of over-vaccinating a pet (e.g. injecting it too often, or using vaccines that are not required for the specific pet)?

Yes – Vaccines should not be given needlessly, as they may cause adverse reactions. Vaccines are medical products that should be tailored to the needs of the individual animal.

2. May I mix different types of vaccines in the syringe?

No - One should never mix different vaccine preparations in the syringe unless specified by the data sheet.

3. May I co-inject different vaccines (not part of a single commercial product) into the same animal?

Yes – but different vaccines should be injected into separate sites that are drained by different lymph nodes.

4. May I use smaller vaccine doses in small breeds to reduce the risk of adverse reactions?

No - The volume (e.g. 1.0 ml) as recommended by the manufacturer generally represents the minimum immunizing dose, therefore the total amount must be given.

5. Should the large dog (Great Dane) be injected with the same volume of vaccine as the small dog (Chihuahua)?

Yes - Unlike pharmaceuticals that are dose-dependent, vaccines are not based on volume per body mass (size), but rather on the minimum immunizing dose.

6. May I vaccinate the anaesthetized patient?

It is best not to do this if possible - the patient may develop a hypersensitivity reaction and vomit, leading to an increased risk of aspiration. Also, anaesthetic agents may be immunomodulatory.

7. May I vaccinate pregnant pets?

No - Vaccination with MLV and killed products during pregnancy should be avoided, if at all possible.

8. May I vaccinate pets that are on immuno-

suppressive or cytotoxic therapy (e.g. for cancer or immune-mediated diseases, such as those with an autoimmune or hypersensitivity pathogenesis)?

No - Vaccination especially with MLV products should be avoided as they may cause disease; vaccination with killed products may not be effective or may aggravate the immune-mediated disease.

9. How long after stopping immunosuppressive therapy do I wait before vaccinating a pet?

A minimum of 2 weeks.

10. May I vaccinate every week if an animal is at high risk of disease?

No - Vaccines should not be given more often than every other week, even when different vaccines are being given.

11. When should the last vaccine dose be given in the puppy and kitten vaccine series?

The last dose of vaccine should be given at around 16 weeks of age.

12. May I inject a killed vaccine, followed at a later time with a MLV for the same disease?

No - The killed vaccine may induce an effective antibody response that will neutralize the MLV in the vaccine, thereby preventing immunization. It would be preferable to give the MLV vaccine first and if/when needed, revaccinate with the killed vaccine preparation.

13. May I inject a modified live intranasal Bordetella vaccine?

No - The vaccine can cause a severe local reaction and may even kill the pet.

14. May I give a killed Bordetella vaccine destined for parenteral use intranasally?

No - This will not stimulate a specific response to the Bordetella; you should give a live vaccine via the intranasal route, as specified by the data sheet.

15. Are precautions necessary when using MLV FHV-1/FCV parenteral vaccines in cats?

Yes - Mucosal (e.g. conjunctival and nasal) contact with the preparation must be avoided, because the vaccine virus can cause disease.

16. Can nosodes (holistic preparations) be used to immunize pets?

No - Nosodes cannot be used for the prevention of any disease. They do not immunize

cont'd on p. 6, column 1...VACCINES

VACCINES...continued from p. 5, column 3

because they do not contain antigen.

17. Should dogs and cats with a history of adverse reaction or immune-mediated diseases (hives, facial oedema, anaphylaxis, injection site sarcoma, autoimmune disease, etc.) be vaccinated?

If the vaccine suggested to cause the adverse reaction is a core vaccine, a serological test can be performed, and if the animal is found seropositive (antibody to CDV, CPV-2, FPV) re-vaccination is not necessary. If the vaccine is an optional non-core vaccine (e.g. Leptospira bacterin) revaccination is discouraged. For rabies, the local authorities must be consulted to determine whether the rabies vaccine is to be administered by law or whether antibody titre may be determined as an alternative.

18. May I use different vaccine brands (manufacturers) during the vaccination program?

Yes – It may even be desirable to use vaccines from different manufacturers during the life of an animal, because different products may contain different serotypes (e.g. of feline calicivirus).

19. Should I use a disinfectant (e.g. alcohol) on the injection site?

No - The disinfectant might inactivate an MLV product, and it is not known to provide a benefit.

20. Can vaccines cause autoimmune diseases?

Vaccines themselves do not cause autoimmune disease, but in genetically predisposed animals they may trigger autoimmune responses followed by disease – as can any infection, drug, or a variety of other factors.

21. May I split vaccines in combination products?

Yes - For example, Leptospira bacterins are often the diluent for the viral antigen combination. The "viral cake" may be resuspended in sterile water, and the Leptospira bacterin be given separately at another site or time, or discarded.

22. Will a single vaccine dose provide any benefit to the dog or cat?

Will it benefit the canine and feline populations?

Yes - One dose of a MLV canine core vaccine (CDV, CPV-2 CAV-2) or a feline core vaccine (FPV, FCV, FHV-1) should provide long term immunity when given to animals at or after 16

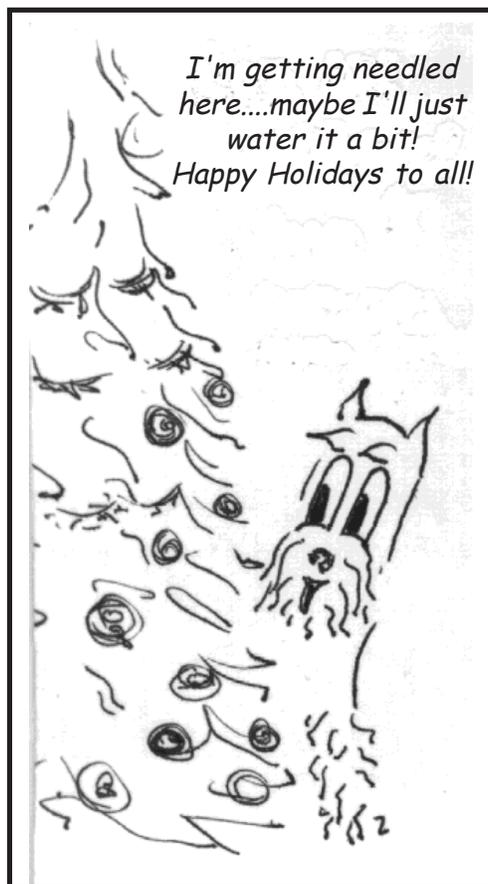
weeks of age. Every puppy and kitten 16 weeks of age or older must receive at least one dose of the MLV core vaccines.

If that were done, herd (population) immunity would be significantly improved. Even in the USA with its good vaccination record, probably <50% of all puppies and <25% of all kittens ever receive a vaccine. We must vaccinate more animals in the population with core vaccines to achieve herd immunity (e.g. 75% or higher) and prevent epidemic outbreaks.

23. When an animal first receives a vaccine that requires two doses to immunize (e.g. killed vaccines like Leptospira bacterins or feline leukemia virus), and it does not return for the second dose within =6 weeks, is there any immunity?

No - A single dose of a two-dose vaccine does not provide immunity. The first dose is for priming the immune system, the second for boosting. If a second dose is not given within 6 weeks of the first, the regime must start again, making sure the two doses are given within 2 to 6 weeks. After those two doses, revaccination with a single dose can be done at any time.

24. May I give a MLV product to a wild, exotic species or to a domestic species other than to the ones which the vaccine was licensed to protect?



No - Never. Many MLV vaccines have caused disease in animal species other than those for which they had been licensed. Even worse: the vaccine could be shed from those animals, regain virulence through multiple passages and cause disease even in the target species for which it had been developed. The consequences could be catastrophic!

A highly effective and very safe vaccine for species that are susceptible to CDV is a canary poxvirus-vectored recombinant CDV vaccine that is available as a monovalent product for ferrets or a combination product for dogs. The monovalent vaccine is being used in many wild and exotic species susceptible to CDV.

25. May I vaccinate a puppy that is at high risk of getting CDV with a human measles vaccine?

No - Due to an insufficient amount of virus, the human MV vaccine is not immunogenic in the puppy. Measles virus vaccines made specifically for the dog (sometimes combined with CDV) will give temporary protection at an earlier age than a CDV vaccine. At 16 weeks or older, the puppy must be vaccinated with a CDV vaccine, to achieve permanent immunity.

26. I know that maternally derived antibodies (MDA) can prevent active immunization with MLV vaccines - but can they also block immunity to killed vaccines?

Yes - MDA can indeed block certain killed vaccines. If the killed product requires two doses, as is often the case, and the first dose is blocked by MDA, then the second dose will not immunize. In this circumstance, the second dose will prime (if not blocked), and a third dose is required to boost and immunize.

This is not true for MLV, where - in the absence of MDA - it only takes a single dose to prime, immunize, and boost. Nevertheless two doses are often recommended, particularly in young animals, to be sure one is given when MDA cannot block. That is why in the puppy or kitten series, the last dose should be given at around 16 weeks of age or later.

27. I have been told that certain canine MLV combination core products need only be given twice, with the last dose at an age as young as 10 weeks. Is that accurate?

No - it is not. No combination core product currently available will immunize an acceptable percentage of puppies when the last dose is given at 10 weeks of age. The last dose should be given at around 16 weeks of age, regardless of the number of doses given earlier.

VACCINES...continued from p. 6, column 3

In the presence of MDA, MLV vaccines either immunize or they don't, and the animal will be either immune or not immune - there is nothing in between. MLV vaccines do not give a little immunity with any dose when blocked by MDA.

28. For how long can a reconstituted MLV vaccine sit at room temperature without losing activity?

At room temperature, some of the more sensitive vaccines (e.g. CDV, FHV-1) will lose their ability to immunize in 2 to 3 hours, whereas other components will remain immunogenic for several days (e.g. CPV, FPV).

29. May I give the same type of vaccine parenterally and intranasally, for example the canine and feline vaccines used to prevent respiratory diseases ('kennel cough' and feline upper respiratory disease)?

Yes - But be sure to give the product approved for that route. If you use the parenteral MLV vaccines containing FCV and FHV-1 locally, you could cause disease in the cat. If you use the killed FCV and FHV-1 vaccines locally, you would not get any immunity and might cause significant adverse reactions. If you gave the intranasal live 'kennel cough' vaccine parenterally, you could cause a severe necrotizing local reaction and even kill the dog, whereas giving the parenteral killed Bordetella vaccine intranasally will not immunize and may cause a hypersensitivity reaction.

However, both types of products can be given at the same time or at various times in the life of the animal. Vaccinating both parenterally and intranasally may actually provide better immunity than vaccinating at only one site. Thus parenteral vaccination provides protection in the lung but little or no immunity in the upper respiratory tract (especially local secretory IgA and CMI), whereas intranasal vaccination will engender good secretory IgA and local CMI and non-specific immunity (e.g. type I interferons), but will not always provide immunity in the lung.

30. Are there dogs and cats that cannot develop an immune response to vaccines?

Yes - This is a genetic characteristic seen particularly in some breeds, and these animals are called 'non-responders'. Genetically related (same family or same breed) animals will often share this non-responsiveness. If the animal is a non-responder to a highly pathogenic agent, like canine parvovirus or feline panleukopenia virus, the infected animal will die if infected. If it is a non-responder to a pathogen that rarely causes death, it may become very sick but will survive (e.g. after a Bordetella bronchiseptica infection).

31. Are there mutants (biotypes or genotypes) of CDV or CPV-2 in the field that the current vaccines cannot provide protective immunity against?

No. - All the current CDV and CPV-2 vaccines provide protection from all the known isolates of CDV or CPV-2, respectively, when tested experimentally as well as in the field.

32. How long after vaccination does it take for the dog to develop immunity that will prevent severe disease when the core vaccines are used?

This is dependent on the animal, the vaccine, and the disease.

The fastest immunity is provided by CDV vaccines - MLV and recombinant canarypox virus vectored. The immune response starts within minutes to hours and provides protection within a day to animals without interfering levels of MDA and dogs that are not severely immunosuppressed.

Immunity to CPV-2 and FPV develops after as few as 3 days and is usually present by 5 days when an effective MLV vaccine is used. In contrast, the killed CPV-2 and FPV-2 vaccines often take 2 to 3 weeks or longer to provide protective immunity.

CAV-2 MLV given parenterally would provide immunity against CAV-1 in 5 to 7 days; when given intranasally, however, the same level of immunity to CAV-1 is not present until after 2 or more weeks.

Time from vaccination to immunity is difficult to determine for FCV and FHV-1 because some animals will not develop any immunity.

33. Will the current 'kennel cough' vaccines provide any protection from disease caused by the new canine influenza virus?

No - The racing greyhounds that have been found infected and that developed disease had been routinely vaccinated 3 or more times a year with commercial 'kennel cough' vaccines. Canine influenza virus is antigenically unrelated to any other virus of dogs, but related to Equine Influenza Virus.

34. If an animal has gone beyond the time that is generally considered to be the maximum DOI for the vaccine (7 to 9 years for CDV, CPV-2, CAV-2; >1 year for Leptospira, Bordetella bronchiseptica; >3 years for rabies), do I have to start the series of vaccinations again (multiple doses 2 to 4 weeks apart)?

No - For MLV vaccines, multiple doses are only required at the puppy or kitten age, when an animal has MDA.

35. What can I expect from the core vaccines

in terms of efficacy in the properly vaccinated puppy/dog and kitten/cat?

Dogs properly vaccinated with MLV or recombinant CDV, CPV-2 and CAV-2 would have =98% protection from disease. Similarly we would expect a very high protection from infection.

For the properly vaccinated cat that had received MLV vaccines, we would estimate that =98% would be protected from disease and infection with FPV.

In contrast, we can expect FCV and FHV-1 vaccines, at best, to protect from disease, especially in a highly contaminated environment (e.g. shelter) and protection would be seen in 60 to 70% in a high risk environment and higher in the household pet cat.

36. Are serum antibody titres useful in determining vaccine immunity?

Yes - Especially for CDV, CPV-2 and CAV-1 in the dog, FPV in the cat and rabies virus in the cat and dog. Serum antibody titres are of limited or no value for the other vaccines. Assays for CMI are of little or no value for any of the vaccines for various technical and biological reasons. Such factors are less of an issue for serological tests where it is much easier to control many of the variables. However, discrepant results are still obtained, depending on the quality assurance program of the given laboratory.

37. Do puppies develop immunosuppression after the initial series of core vaccines?

Yes - If a combination product containing MLV-CDV and MLV-CAV-2 with other components is used, a period of immunosuppression lasting approximately 1 week develops, beginning 3 days after vaccination. If the combination vaccine does not contain either MLV-CDV or MLV-CAV-2, then such suppression does not occur.

Biographical Profile

Dr. Ron Schultz earned his BS degree (1966), MS (1967) and PhD in Immunology and Veterinary Pathology (1970) from the Pennsylvania State University. From 1970 to 1978 he was an Assistant then Associate Professor at NY State College of Veterinary Medicine, James A. Baker Institute, Cornell University. He established the first Veterinary Clinical Immunology Laboratory in the US while on the faculty at Cornell. He also served as Associate Director of the Human Health Service Laboratory at Cornell University. From 1978 to 1982 he was a Professor and Director of the Veterinary Clinical Immunology Laboratory that he established in the School of Veterinary Medicine, Auburn University. He accepted his current position as Professor and Chair of the

VACCINES...continued from p. 6, column 3

Department of Pathobiological Sciences, School of Veterinary Medicine, UW-Madison in 1982. At the time he accepted this position he was the only member of the department which now has many faculty, staff and students, including faculty in the Wisconsin Veterinary Diagnostic Laboratory. He is an honorary diplomate of the American College of Veterinary Microbiologists. Dr. Schultz has won several awards, is a member of numerous professional organizations and served or serves on numerous Editorial Boards and National and International advisory panels. He is on the AAHA Canine Vaccine Task Force, the AAFP Feline Vaccine Task Force that provide Guidelines for Canine and Feline Vaccines and Vaccination Programs as well as the Vaccine Guideline Group for the World Small Animal Veterinary Association. He has served on National Academy of Science panel to review USDA Grants Programs and was recently invited to be a Member of the Assessment Panel to review research programs of the USDA's Agriculture Research Service Laboratories throughout the US.. He was the first president of the American Association of Veterinary Immunologists and has been president of the Conference of Research Workers in Animal Disease. He has published more than 200 papers on the immunology and microbiology of animal disease, clinical immunology and vaccinology and has edited several books and holds multiple patents. He has trained more than 50 graduate students and postdoctoral fellows in his laboratories at Cornell, Auburn and Wisconsin. He has received millions of dollars in extramural research funds for research primarily to study diseases of dogs, cats and cattle and also received funding for instructional training programs.

President's Message

As I come to the end of my first full year as your President, it pleases me to look back and review the club's accomplishments during 2007. We have many dedicated members that take on responsibilities and do great things for the club. Only through these folks' efforts is the AMSC able to make these accomplishments and continue to protect and promote our beloved breed.

Early in 2007, through Performance Chair Sonny Lelle's efforts, we were able to get approval from AKC to hold agility trials. Because of our experienced membership, Sonny was able convince AKC to forgo the normal approval process of holding matches. By accomplishing this, we will be able to hold our very 1st National Agility Trial on January 17, 2008 in Portland, OR.

At our 1st Board Meeting in 2007, our Treasurer Sharon Edwards presented to the Board a plan to put into practice new financial controls. Sharon and her Finance Committee worked rigorously to develop these controls. By using these controls, we will now be able to better manage and protect the club's assets.

This spring AB1634, the proposed mandatory spay and neuter bill in California, was looking to become a reality. This would have been devastating for breeders in California and set a nasty precedent for all breeders across the country. The AMSC and many of our members wrote letters to legislators to help them to understand the shortcomings of this very flawed piece of legislation. Many of our dedicated members in California personally attended legislative hearings so our voice would be heard. We can all be very proud that this bill was defeated.

In September, we implemented a new and improved website. The whole look and feel of the website was renovated to have a more modern and polished look. In addition, several new features were added; a "search" feature, an on-line store with our special projects, and the ability for committees or local clubs to have their own pages, which they can update. Our Webmaster, Hilde Haakensen, worked very hard and spent much time to get this new and improved website available.

Susie Atherton and her committee of Chris Levy and David Kirkland implemented long overdue Membership Awards. The committee developed the categories and implemented the system to determine the winners. These awards acknowledge the top obedience dogs, agility dogs, conformation dogs, and breed-

ers. The award's inauguration at our Annual Meeting this year was wonderful.

Carole Weinberger had a terrific idea of recognizing long time members of our club. She ran with the idea and starting in 2007, we now give a sterling silver pin, similar to the 3-year pin, to recognize longtime membership in our club.

Early in the year, we contracted with a professional studio, PureBred Studios, to record our National Specialty at Montgomery County. Several members helped with the development of this project, including narration of the DVD. The final product was a very high quality 3 DVD set. In addition, it has garnered the club over \$1000 in fundraising.

Kathy Colby, Brooke Walker, Vera Potiker and others from our Southern California Miniature Schnauzer Club represented us at this year's "Meet the Breeds" booth at the AKC/Eukanuba Invitational in Long Beach, CA. From all reports, they did an excellent job. As an added bonus, they have created for us a "traveling" package. This package can now be re-used at any location where we want to promote our breed.

I must say how appreciative I am of the efforts so many folks put into the club. With their continued help and the help of others, I hope for AMSC to accomplish even more in 2008.

As I have said before, please remember this is your club. Every member is an important piece of the American Miniature Schnauzer Club. Every member's constructive input is appreciated and encouraged. Please always feel free to contact me or any Board member with your comments and input.

May all of you (and your schnauzers) have a wonderful 2008. I hope to see many of you at one of our specialties this year.

Regards,

John

We all do a little procrastinating....and it seems that Club membership dues get the brunt of the procrastinations.

Don't forget to pay your DUES!

We're goin' to the park!



TOPS

TERRIERS ONLY PERFORMANCE SUMMIT

May 16-19, 2008
Island Grove Regional Park
Greeley, CO

Agility, Rally and Obedience are sponsored by the Rocky Mountain All-Terrier Club
Earthdog is sponsored by the Rocky Mountain Earthdog Club

Plans are tentative, but here is what is being discussed:

"There may be demos of terriers races, flyball, freestyle, an opening parade of terriers, photo contests, etc. We're planning on agility, obedience, and rally Fri, Sat, Sun, with earthdog at a different site on Monday."

For information check the website:
www.tops2008.net
Information will be updated as plans are finalized.
Terriers Only Performance Summit

The Point of Acupuncture

No one enjoys needles. But when it comes to acupuncture, it seems that being pricked can help to treat a number of health problems – even when it comes to dogs! But is this form of treatment accepted by vets?

A Little Bit of Acupuncture History

Chinese Theory: The Chinese theory of acupuncture explains that the purpose of the treatment is to open a dog's channels in order to allow the "qi" (flow of energy) to flow and restore the natural balance of the body.

Western Theory: In the Western world, acupuncture is believed to stimulate a dog's nerves while increasing blood circulation. When acupuncture is appropriately administered pain-reducing endorphins are released.

How Can Acupuncture Help?

Veterinarians who are open to using acupuncture therapy may use it in any of the following ways:

Primary treatment: If a veterinarian opts to use acupuncture as a primary method of treatment, then a dog is most likely to be treated solely with acupuncture therapy.

Secondary treatment: Acupuncture therapy as a secondary method of treatment

means that it is being used in conjunction with another type of treatment, whether it be medicinal or therapy based.

Alternate treatment: When a doctor suggests acupuncture treatment as an alternate treatment it means that it will be implemented only if another form of standard treatment proves ineffective.

Acupuncture is thought to potentially help dogs with the following types of conditions:

- Pain
- Respiratory disorders
- Liver disease
- Neurological disorders
- Skin disorders
- Reproductive and metabolic problems
- Kidney problems
- Urinary disorders

Is Acupuncture Accepted in the Veterinary World?

Because there is a lot of speculation surrounding how acupuncture really works and whether or not it is actually effective, many veterinarians are still hesitant to recommend this form of treatment. However, some veterinarians are beginning to accept acupuncture, as the treatment has proven quite effective in pain management. Consult your veterinarian for further information on acupuncture therapy.

CANINE RABIES CHALLENGE STUDIES BEGIN !

One of the most important vaccine research studies in veterinary medicine is underway at the University of Wisconsin School of Veterinary Medicine in Madison. Dr. Ronald Schultz, a leading authority on veterinary vaccines and Chair of the Department of Pathobiological Sciences, has begun concurrent 5 and 7 year challenge studies to determine the long-term duration of immunity of the canine rabies vaccine, with the goal of extending the state-mandated interval for boosters. These will be the first long-term challenge studies on the canine rabies vaccine to be published in the United States.

Dr. Schultz comments that: "We are all very excited to start this study that will hopefully demonstrate that rabies vaccines can provide a minimum of 7 years of immunity."

This research is being financed by The Rabies Challenge Fund, a charitable trust founded by pet vaccine disclosure advocate Kris L. Christine of Maine, who serves as Co-Trustee with world-renowned veterinary research scientist and practicing clinician, Dr. W. Jean Dodds of Hemopet in California. The Rabies Challenge Fund recently met its goal of \$177,000 to fund the studies' first year bud-

get with contributions from dog owners, canine groups, trainers, veterinarians, and small businesses. Annual budget goals of \$150,000 for the studies must be met in the future.

Dr. Jean Dodds, DVM states: "This is the first time in my 43 years of involvement in veterinary issues that what started as a grass-roots effort to change an outmoded regulation affecting animals will be addressed scientifically by an acknowledged expert to benefit all canines in the future."

Scientific data published in 1992 by Michel Aubert and his research team demonstrated that dogs were immune to a rabies challenge 5 years after vaccination, while Dr. Schultz's serological studies documented antibody titer counts at levels known to confer immunity to rabies 7 years post-vaccination. This data strongly suggests that state laws requiring annual or triennial rabies boosters for dogs are redundant. Because the rabies vaccine is the most potent of the veterinary vaccines and associated with significant adverse reactions, it should not be given more often than is necessary to maintain immunity. Adverse reactions such as autoimmune diseases affecting the thyroid, joints, blood, eyes, skin, kidney, liver,

bowel and central nervous system; anaphylactic shock; aggression; seizures; epilepsy; and fibrosarcomas at injection sites are linked to rabies vaccinations.

Study co-trustee Kris Christine adds: "Because the USDA does not require vaccine manufacturers to provide long-term duration of immunity studies documenting maximum effectiveness when licensing their products, concerned dog owners have contributed the money to fund this research themselves. We want to ensure that rabies immunization laws are based upon independent, long-term scientific data."

More information and regular updates on The Rabies Challenge Fund and the concurrent 5 and 7 year challenge studies it is financing can be found at the fund's website designed by volunteer Andrea Brin at: www.RabiesChallengeFund.org.

**WHAT EVER
YOU DO...
GET YOUR
DUES IN!**

AKC Eukanuba Invitational December 2 , 2007

Best of Breed

Judge: Mr. Jorge Nallem

Best Bred By Exhibitor

Judge: Mr. Jorge Nallem

BOB... Paradox How Do you Like Me Now

BOS...Ch. Bravo's Takin Care of Business

BBBE...Ch. Alpine Loft Carmel Gluhwein / Child

Award of Merit

Ch. Alpine Loft Carmel Gluhwein / Child

Ch. Carmel Race to Kelvercrest

Ch Sterling Ugly From the Front

Ch. Sumerwynd Stiff Competition

Congratulations to all!

BLACK RIBBONS

"Ch. Sensations Staying Alive"—Barry
(Ch Bandsman's Newsprint X Ch Sensations
Amanda C.)

Barry was true to his given name developing diabetes at 18 years. He was given insulin daily by his loving owners Lynne & George Grosvenor of Aurora, Ontario but suffered a heart attack on November 25, 2007 and died at age 18.5 years.

He is sorely missed and loved not only by his owners but by his breeder, handler and other Mother and co-owner, Irene Wessler. Barry was predeceased by two of his litter sisters in 2005.

Thank you Carol for your boy's wonderful genes which continue on in Barry and Annie's children and grandchildren."

Bouquets & Biscuits

***Ch. Orleans' Fils Noir de Twister** (Black) by Ch Regency's Twist of Fate X Ch Orleans' Antoinette la Puce. "Sonny" finished his requirements for AKC championship title on December 15 at the Central Florida KC show at 13.5 months of age. Sonny was shown only for five weeks, on one coat to his championship exclusively in the Bred-by class by owner/breeder Darlene Petche including several breed/group wins. Loves to show, needs to grow up - hope to special him!

***CH Loneacre's Small Town Girl, CDX, RA, MX, MXJ, NF** (CH Sumerwynd Seventh Wonder II x CH Loneacre's Just My Style, OA. OAJ) and Loneacre's Firecracker, CD, RA, MX, MXJ, XF (CH Dimensions Hot Pursuit UD, RN, NA x CH Loneacre's Charmed I'm Sure) both earned their Rally Advanced Title at Companion Dog Training Club of Flint, Michigan, on November 2, 2007. Morgan and Connor are owned and trained by Lynn Baitinger, and were bred by Beth Santure.

MEANWHILE AT THE SHOWS

SHOW	DATE	DOG	OWNER	WIN
Greater Naples DC	24-Nov	Orleans' Fils Noir de Twister	Petche	WD/BOS
Greater Naples DC	8-Dec	Orleans' Fils Noir de Twister	Petche	WD/BOW/BOB
Greater Miami DC	9-Dec	Orleans' Fils Noir de Twiste	Petche	WD/BOW/BOB/BBEG1/G4
Space Coast KC	14-Dec	Orleans' Fils Noir de Twister	Petche	WD/BOW/BO
Central Florida KC	15-Dec	Orleans' Fils Noir de Twister	Petche	WD/BOW/BOB

TROPHY DRIVE...

please don't forget the trophy drive.

Joanne Toft/Teresa Handlen
1304-1411th Ave.
Lincoln, IL. 62656

Platinum Standard \$100 and over
Gold Standard \$50 — \$100 Silver
Standard \$25—\$50.00 Pewter
Standard Under \$25.00

Donations are used for Conformation and Performance at all 3 National Specialities.

Thank-you for all donations.

RESCUE always needs a hand!
Michele Smith should know what the Local Clubs are doing about rescue.

Please contact her.
Michele Smith
1954 First Street, #230
Highland Park, IL 60035-3124
847-926-9920
msmith@cmscrescue.com

For anyone who has changed address, email, phone information lately, please let us know so we can update the AMSC roster.

Also, if you are listed on the AMSC website (<http://amsc.us>) in our Breeders List, Rescue pages or Local Clubs section, you should check those listings to make sure they are current.

"Try it, you'll like it!"... and you'll save AMSC some money.

Try receiving AMSCOPE via email.

It's much better....and you'll not only like it...you'll LOVE it!

MEN'S 3-BUTTON SPORT SHIRT
 Beige with contrasting collar and
 sleeve trim

\$35 plus \$5.00 postage

SIZES: Medium, Large, XL, XXL

MEN'S 3-BUTTON SPORT SHIRT
NAVY WITH POCKET

\$35. plus \$5.00 postage

SIZES: MEDIUM,LARGE, XL, XXL

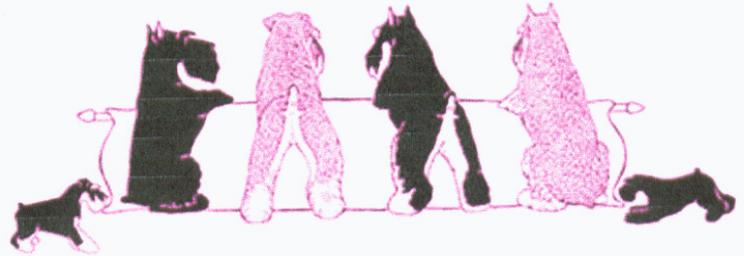
SWEATSHIRT in STEEL BLUE

\$40. plus \$5.00 postage

SIZES: SMALL,MEDIUM,LARGE, XL, XXL



FRONT



BACK

Lori Bush



This beautiful colorful woven 100% cotton afghan of Miniature Schnauzers in a garden setting will be a keepsake. Black, Salt/Pepper and Black/Silver Minis are at home on green grass with colorful shrubs, trees and flowers in the background.

Lori Bush and Mildred Shultz collaborated with the artist at We Love Country on this very unique design.

\$65. Plus \$5. Shipping

NEW

APRONS

red or grey

\$20. plus postage



NEW GYM BAGS

water-resistant fabric
 outside and end pockets

bright red color

\$40. plus postage

AMSC FLOOR MATS

These striking logo mats are dye injected and are made of high quality nylon and are 100% launderable in cold water. They can be used indoors or outdoors, since they can be washed but will last longer if not subjected to extreme weather. The will be perfect for grooming room, offices, motor homes, condos, or to stack your puppies on. They measure 22" X 33".

Cost of the mat is 65.00 plus 15.00 shipping and handling.

ORDER FORM

ITEM	SIZE	QUANTITY	PRICE EACH	TOTAL
Ladies	_____	_____	@\$30.00	= \$ _____
MEN'S	_____	_____	@\$35.00	= \$ _____
MEN'S/POCKET	_____	_____	@\$35.00	= \$ _____
SWEATSHIRT	_____	_____	@\$40.00	= \$ _____
AFGHAN	_____	_____	@\$65.00	= \$ _____
GYM BAG	_____	_____	@\$40.00	= \$ _____
APRON	_____	_____	@\$20.00	= \$ _____
TOTAL POSTAGE				\$ _____
TOTAL ENCLOSED				\$ _____

**Make checks payable to
 AMSC**

**Send order to:
 Carla Nickerson
 5499 Shoshoni Trail
 Pocatello, ID 83204-4609
 208-232-4191
 nicknack2@cableone.net**

Shipping to US \$5.00
 Shipping to Canada \$7.00 (US)
 Shipping Overseas \$15.00 (US)



AMSCOPE

Carla M. Borrelli, Editor
1799 South Creek Road
Derby, NY 14047-9729

UPCOMING SPECIALTIES

Chicago MSC February 23, 2008
Regular Classes: Peter Green
Sweepstakes: Janice Rue

GMSC February 29, 2008
Regular Classes: Penny Hirstein
Sweepstakes: Charlotte Stukey
Obedience: Lynn Tamms

MSC of Atlanta April 13, 2008
Regular Classes: John Constantine
Sweeps: Amy Gordon

Chicago MSC/GLATA June 14, 2008
Regular Classes: Barbara Schulenberg
Sweepstakes: Sue Okoniewski

MSC of Southern California June 21, 2008
Regular Classes: Scott Kellogg
Sweepstakes: Linda Drost

AMSC SPECIALTIES

Roving Specialty-Portland, Oregon January 19, 2008
Regular Classes: Michele L. Billings
Sweepstakes: Linda Drost

Great Western Terrier Assoc. June 22, 2008
Regular Classes: Lydia Coleman Hutchinson
Sweepstakes: Carla Nickerson

Montgomery Co.KC October 5, 2008
Regular Classes: Carole Luke Weinberger
Sweepstakes: Sue Baines

Chicago International February 22, 2009
Regular Classes: Lanny Hirstein
Sweepstakes: Shawne Imler

Great Western Terrier Assoc. June 21, 2009
Regular Classes: Penny Hirstein
Sweepstakes: Brian Bogart

Montgomery Co.KC October 4, 2009
Regular Classes: James Reynolds
Sweepstakes: Jean Heath

FOR YOUR CONVENIENCE: The following information is given to help conduct AMSC business more efficiently. Please remember that the Secretary and the AMSCOPE editor should **BOTH** be notified of address changes, club officers and specialty results.



cost includes postage:
\$20. for US
\$25. outside US

Send check or money order made
out to AMSC to:

Patricia O'Brien
1703 Russell Way
Roseville, CA 95661-3617
916-782-1418

Emerald_Isle_95661@yahoo.com

PRESIDENT

Mr. John Constantine
1 Independence Place
Apt 301
Philadelphia, PA 19306
215-527-0056
Adamisms@hotmail.com

VICE PRESIDENT

Mrs. Carole Weinberger
5897 Buford St
Orlando, FL 32835
407-822-8103
(Cell) 407-375-7623
bandsman@earthlink.net

SECRETARY

Ms Amy Gordon
342 Putnam Ranch Road
West Palm Beach, FL 33405
aragonms@worldnet.att.net
secretary@amsc.us

TREASURER

Sharon Edwards
21301 Golf Estates Drive
Laytonsville, MD 20882-5109
301-947-8811
301-379-8811
rtesle@comcast.net
treasurer@amsc.us

MEMBERSHIP

Mary Ann Shandor
2302 Cumberland Court SW
Decatur, AL 35602
Phone: 256-351-6942
tuckarry@aol.com
membership@amsc.us

AMSCOPE EDITOR

Carla M. Borrelli
1799 South Creek Rd.
Derby, NY 14047-9729
Phone :716-627-3206
cborr@aol.com

AMSC Web page: <http://amsc.us>
AKC home page: <http://www.akc.org/akc/>