

Minnesota State Pigeon Association

MSPA Official Newsletter

Fall 2015

Thanks to the efforts of our knowledgeable members this issue is again full of great articles and information about the pigeon hobby. If you have an idea for the newsletter or would like to contribute an article, please contact us at MSPA@usa.com, we would welcome your input.

The Electronic Newsletter is here!

Due to the cost of postage and printing a high quality newsletter, the MSPA Board of Directors has decided to make the quarterly newsletter available on the MSPA web site only. Over 93% of the current members have submitted e-mail addresses so we know that the bulk of our members have access to the internet. For the minority of members that don't have internet access, they can view the newsletter at their local library or request a mailed copy at: **MSPA Membership 8108 291st Ave NW Princeton, MN 55371** or call (612)889-2945. Prior to the posting of every Newsletter a postcard will be sent to each member alerting him/her to the availability of the new on-line Newsletter. For the time being no password is necessary to view the "Membership Section" of the web site. An archive of past newsletters will also be available on the MSPA web site. The Newsletter can be downloaded or printed from the web site if the member desires a hard copy.

It is Show Time!

The North Star Classic, NPA 5th District Meet, hosted by the Minnesota State Pigeon Association will be held at the McLeod County Fairgrounds on November 14, 2015. Over 30 Specialty Clubs will be in attendance. Well over 1,200 entries are expected. There will be cash prizes, raffles, and free parking. For more information go to: www.MinnesotaStatePigeonAssociation. An official entry form is found on the web site. Please join us at the show. It will be a great one

Officers' Reports

A Message from our President: Paul Lepinski

That time of the year has arrived again; the MSPA will be hosting the North Star Classic this year on the 14th of November 2015. We are very fortunate to be able to be having a show this year with several other states not allowing any shows what-so-ever. There will be a few bio-hazard precautions at the show this year and the set up done a little differently to abide by the agreement with the Minnesota Board of Animal Health. Setup up for the North Star Classic will begin at 8:00 a.m. on the 13th of November 2015. We appreciate all the help we can get to make this another successful show. Please help if you possibly can, it takes allot of effort by the few that do help.

This is the election year and if you are interested in running for a office within the MSPA please contact me at paulsloft@mchsi.com or (320)223-0415. I will not be running for an office this upcoming election and for those of you that have supported me in the past I Thank You from the bottom of my heart. You that supported me and the MSPA, with my love for the hobby is the reason for the success of the North Star Classic and this club. We have collectively increased the numbers of quality birds at the show and some of you have become great promoters of our club. I ask one favor of all of you please support the North Star this year by entering and advertising our show to all the hobbyist you know. I feel as though I have served this club in the best interests of the majority of the members and for the few that are grateful I am leaving this is your time to step forward and see what you can do.

I look forward to visiting with as many as you as possible. Until the North Star Classic stay healthy as possible and be safe.

A message from our 1st Vice President: Don Steinbruckner

On Sunday September 20th Amador Township, the township that I live in, hosted a apple festival. Rick Opatrny, Wayne Strong, Lenny, and myself, set up a display of birds. Ten different breeds were represented. This brought back memories to some of the visitors, either by raising birds themselves or knowing someone who did. One visitor, who grew up in England, mentioned that there were pigeon lofts in every other house in his town. Young and old enjoyed looking at the birds, with lots of questions. Like, why are there feathers on there feet? They had questions about the size, shape and colors of the birds. The Parlor Roller that I brought along entertained everyone with the performance it did. That brought on squeals of delight from the kids that watched. It was a long and exciting day. But vary well worth it. Getting the word out there what pigeons are really like.

A message from our 2nd Vice President: Tim Kvidera

Sounds like Paul Lepinski has drummed up plenty of specialty club meets for the upcoming North Star Classic. It should be a great show. A big event like this always takes a lot of efforts by many people. Any extra hands are always welcome from set-up, during the show and at teardown. Please consider helping out wherever you can.

This year's episode of Avian Influenza has us needing to do a lot of biosecurity measures that may be unfamiliar to you. But they are part of the requirements for us to be able to hold the show. EVERYBODY needs to comply with these measures. Remember only pigeons and doves will be allowed on the site. There will be disinfectants throughout the show. Birds will be caged a little different than may breeds have been doing historically - birds must be caged by exhibitor rather than color class. There will be barriers between each exhibitor's birds. Fantails and Indian Fantails have been caging birds by exhibitor for years and find that it helps exhibitors keep an eye on their birds, ensure they are fed and watered, etc. It also minimizes contact with other birds and exposure to whatever.

Hope to see you there.

MSPA Treasurer's Report- Executive Summary September 13, 2015

Respectfully submitted by Ardy Prekker - Treasurer

Current through the business day ending 9-11-2015

Respectfully submitted by Ardy Prekker - Treasurer

Greetings Fellow Board Members and Other Interested Members:

Membership and Activity:

There has been a lot of activity since I assumed the Office of Treasurer for the MSPA. The current paid membership stands at 77 members. These members are paid through December 31 of 2015 or beyond. Our current mailing list has 175 members who have paid through December 31 of 2013 or beyond. As of this date only 44% of listed members are current on their dues. It would be my suggestion to the Board that we drop any member who has not paid through at least 2014. All 175 listed members received the Summer Newsletter and the appeal to come current on their dues.

The Summer Newsletter was 20 back to back pages and was printed and mailed at a cost of \$472.50 including postage. 180 copies of the Newsletter were printed and 177 were mailed. If we produced a similar Newsletter 4 times per year, the cost would be \$1,890.00 per year and it would take the dues from approximately 160 members per year to cover the cost. Therefore, my suggestion in paragraph one, to eliminate the most delinquent former members, would reduce our cost. I would also suggest that, rather than mailing the Newsletter, we simply make it available under the Members Section tab on the MSPA web site. Then, at most we would send a postcard to members alerting them to the availability of a new newsletter on the site. The very few members without computers could view the newsletter at any public library or could request that a hard copy be sent to them after receiving the post card alert. Mailing a meaningful Newsletter 4 times per year at our current dues level is not economically viable!

Getting changes and improvements to our current web site is a slow and cumbersome process. This is not due to either the ability or the enthusiasm of our current web developer, but simply a product of priorities given the small fee we pay for the development. I would strongly recommend to the board that we budget additional resources to our online development in the future, rather than spend additional money on conventional contact methods (paper newsletters, post cards, etc.) if we hope to attract a younger group of members to our hobby and club.

Financial and Banking:

The current balances in the MSPA Trust checking account are \$259.59 and the savings account is \$2,000.00. These balances are reflected on the attached statement and include \$275.00 in dues payments and \$255.00 in fees paid for ads in the 2015 Show Premium book. They also represent the payment of our Property and Casualty liability insurance to Grinnell Mutual Insurance Co. for \$485.00 and a payment to Taylor Made Specialties for trophies for last year's show of \$69.19. Of course, complete detail is available on request for any expense, deposit or balances.

Minutes of MSPA Executive Board Meeting Thursday September 17, 2015

The conference call meeting was called to order by President Paul Lepinski with Ardy Prekker and Don Steinbruckner in attendance. Tim Kvidera joined in progress.

Ardy Prekker presented the Treasurer's report which was accepted as presented. 175 bulletins were sent out to current and recent former MSPA members as well as potential interested parties requesting that those in arrears consider renewing their membership. Currently there are 77 members paid through 2015 or beyond. Treasury balance as of September 11, 2015 was \$2,259.59 with no outstanding debts. Income from North Star Classic premium book ad sales are coming in.

There will be a MSPA bulletin issued by the end of September. The newsletter will be generated electronically and loaded onto the MSPA web site. Post cards will be sent to all members paid up for 2014 through current, informing them that the bulletin is on the MSPA site, and if they are not paid up through 2015, or beyond, this will be the last MSPA bulletin they will have access to. If they are not computer literate or have a way to connect to the web site, they may request a hard copy which will be sent them. Paul Lepinski will chair the Election Committee and select two additional committee members. Cut off for nominations will be November 30, 2015. Ballots for election of officers will be sent only to currently paid up members. Ballots will be counted at the January MSPA meeting.

Premium book ads have been selling well for Paul. Ardy will solicit additional ads from some of his contacts.

Discussion and concurrence was achieved for the MSAP sponsored awards to be offered at the North Star Classic. They are similar to what has been provided in the past and will be listed in the premium book. New, will be any junior exhibitor who shows 7 or more birds will get a years membership to the National Pigeon Association paid for by the MSPA. If they are currently a NPA member MSPA will pay for a renewal year. MSPA will provide a commemorative mug to all exhibitors showing 10 or more birds. Excess mugs will be available for purchase. Junior poster competition will be eliminated.

The necessity of complying with required biosecurity measures at the show will be stressed in the premium book. MSPA will hire a security person (off duty police officer) to ensure compliance with state mandate that no birds other than pigeons and doves be allowed on the grounds.

Show set up will begin at 8:00 Friday. Paul is attempting to get STS or FFA assistance in setting up the show. May need to secure a second all breeds judge. Show hall needs to be set up in compliance with state biosecurity guidelines with foot baths at the doors, hand sanitizers available throughout the hall and entries separated within breeds by exhibitors. Expecting a large turnout we have the option of renting the archery building adjacent to the show hall for the swap area and some of the vendors.

Respectfully submitted,
Tim Kvidera, 2nd Vice President

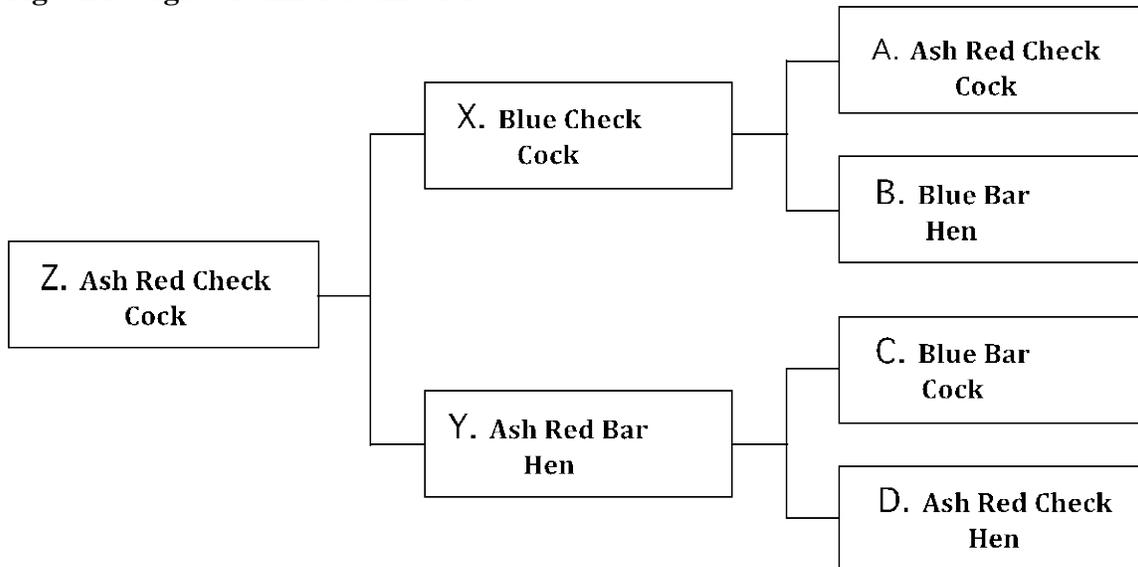
Fun New Quiz!
"The Pigeon Pedigree Puzzler".

Submitted by G. B. Peterson

I am a fan of Piano Puzzlers on the MPR classical music station. Every Wednesday afternoon, Bruce Adolphe (prof. at Juilliard) plays an improvised piano piece in the style of a classical composer, but the basic theme is a well known tune from every day life, perhaps a child's nursery tune or an old folk tune or a pop music tune, etc. The listener has to try to guess the classical composer he is imitating, #1, and also identify the pop tune, #2. Some are easy as pie, while others are totally obscure --- until they're solved, that is. Yesterday, for example, the style was that of Olivier Messiaen, and the tune was "Hey Jude", by Paul McCartney. I wouldn't have got that one in a million years, but sometimes I can get them right away. It's a lot of fun.

It occurred to me that we could do something like that as a regular feature in the MSPA newsletter, call it "Pigeon Pedigree Puzzler". I have created the first one as an example for this Newsletter. There are oodles of these that could be put together, some pretty subtle. We would love your contribution to the quiz for future additions. This quiz will be a regular part of each Newsletter and you will find the answer on the last page. **NO CHEATING!**

Pigeon Pedigree Puzzler Number 1:



From among the three individuals X, Y, and Z depicted in the pedigree above, one is a genetic impossibility. Which one, X, Y, or Z, is the genetic impossibility? Why is it genetically impossible?

See the last page for the answers.

BREEDING SEASON WATER CONSUMPTION

Submitted by -Tim Kvidera

Study done 1978, originally published APJ Sept, 1982

A few years ago while brainstorming with Clair Hetland during one of my lunch hour sorties over to Foy's the topic of water consumption came up. Over the years there have been a few articles written on this subject, but usually as a comparison between pellet fed and grain fed birds. Our discussion related to water dissolved dosages and concern that the birds do not consume a uniform amount of water day to day. As a spin-off of the conversation I set up what developed into a three month gathering of water consumption data in my loft resulting in the following summary - non-breeding birds consumed a relatively stable 35 milliliters of water per day while breeding birds go through a cyclic increase of consumption which peaks to more than double that while the squeakers are about three weeks of age.

The procedure used throughout this study was to supply the birds with a measured amount of water via 500 and 1000 ml volumetric flasks and daily weighing the remaining water prior to the evening feeding. Water consumption was figured as the difference between the water given and the weight left, less a correction for daily evaporation from the fountain. The net water consumption was then divided by the number of birds with access to it, providing the average consumption per bird. In the breeding sections the colony size was taken as the adults present since young birds did not have access to the water directly, but only via their parents. Squeakers were removed from the section as soon as they left the nest box. The data presented here includes only that from two Flying Tippler breeding sections and an odd bird pen as the non-breeding control. Data was collected on Indian Fantails and Fantails also. The former agrees well with that presented. Due to the erratic nesting tendencies of my Fantails, never were enough pairs in the same portion of the breeding cycle to produce a meaningful average.

The water fountains used were plastic gallon jugs with two openings, approximately 5 x 2 inches each cut on opposite sides resulting in fountain capacities of slightly more than one liter. In addition to the fountains provided to the birds for drinking some were left outside the sections, but within the loft, to determine the daily evaporation loss. With the exception of the days in which the fountains were tipped over and spilled by the birds (resulting in no data that day) water was available on a 24 hour basis. All birds were fed on a 100% grain diet, a commercial no-corn mixture spiked with 33% corn.

Table 1 shows the per bird water consumption average for two breeding sections, nine pair of Tipplers in one and thirteen pair of Tipplers and Pheasant Pigeons in the other. There is good intersectional correlation when the data is plotted independently. Both sections were paired up on the same date and virtually all pairs settled into the breeding cycle within a couple days of each other with the young birds hatching less than a week prior to initiation of this study. Although the breeders initially consumed about the same amount of water as the non-breeders, Table 1 verses Table 2, they quickly increased to double that of the non-breeders by the time that the young birds were three weeks of age.

Their water consumption then tapered off and continued to drop even after the first round squeakers were removed on May 7th. As the second round of youngsters developed again the breeders' water consumption increased, also peaking at the three week stage of the offspring. The second round was removed on June 12th and the consumption again cycled up with the growth of the third clutches. You will note some loss of definition and resolution of the data curve with time. This I attribute to the breeders getting progressively more out of sync as the season advanced. It might be interesting to gather data on individually penned breeders relating the water consumption verses the stage of the breeding cycle.

Table 2 plots the per bird average water consumption of the non-breeding control birds. Although they start the study lower, in the cool weather, they by the end of April are up to a relatively stable consumption of about 35 milliliters each. For those of you who do not think metric one fluid ounce is about 30 milliliters. The data gap in early June was due to a weeklong business trip.

Included in Table 3 is a charting of the daily evaporation corrections. There is a noticeable day to day fluctuation. Interestingly there is not a consistent increase in consumption by the controls on the days of high evaporation.

Through early May data was also gathered comparing water consumption of an old bird flying kit of eight verses the non-breeding controls. In addition to being flown every other or third day the kit was only watered once daily, following the evening feeding, while the controls had constant access to water.

for the month the kit averaged 17 mls. consumption per bird per day while the controls were almost double that at 31 milliliters each.

Now back to the question that prompted this study. Should we be concerned with how much water a bird is drinking when we dose our flocks via the water fountain? The answer depends a lot on what one is putting into the water and for what reason. The above displays that depending on stage of the breeding cycle a bird will consume varying amounts of water, sometimes in excess of double the non-breeder. If the drug used is all retained by the parent it will be getting an extra heavy dose. If it gets passed on to the youngsters they can get a bigger dose than you expect. Especially when you considered that at the time they are getting the most water from their parents they are not fully grown.

Fortunately most of the drugs that we use as pigeon breeders have a wide widow of safety. There is a lot of room between the required amount to perform and the lethal dose. So usually we do not have to be overly concerned about who is drinking how much. The convenience of flock treatment by way of the drinking fountain is a blessing which has been, and will be, used extensively even though it has some limitations. If you want to be certain of the dosage received you have to resort to the more cumbersome pills or injections given individually.

TABLE 1
Per Bird Water Consumption
- Breeders -

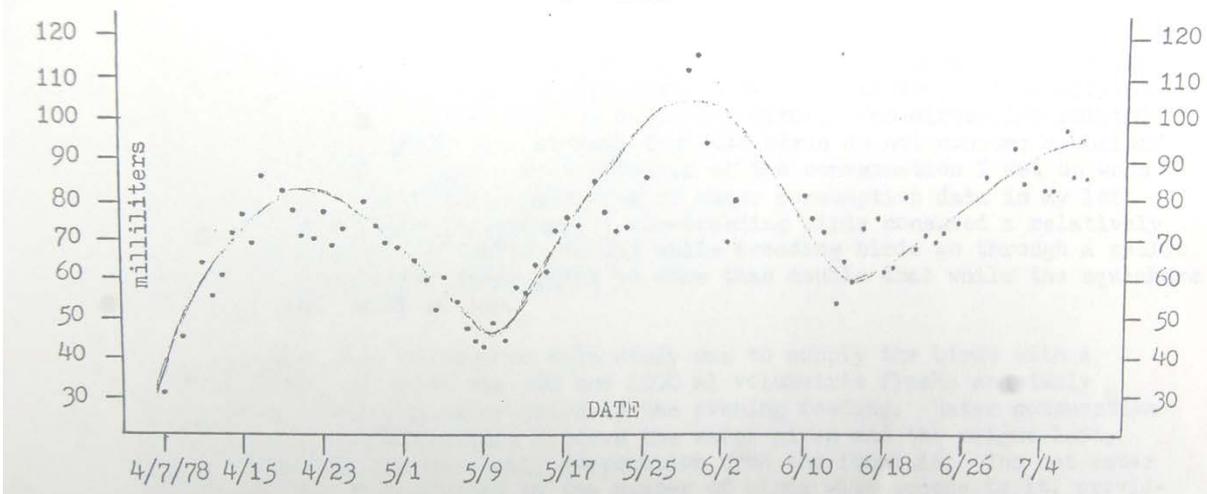


TABLE 2
Per Bird Water Consumption
- Non-breeding Controls -

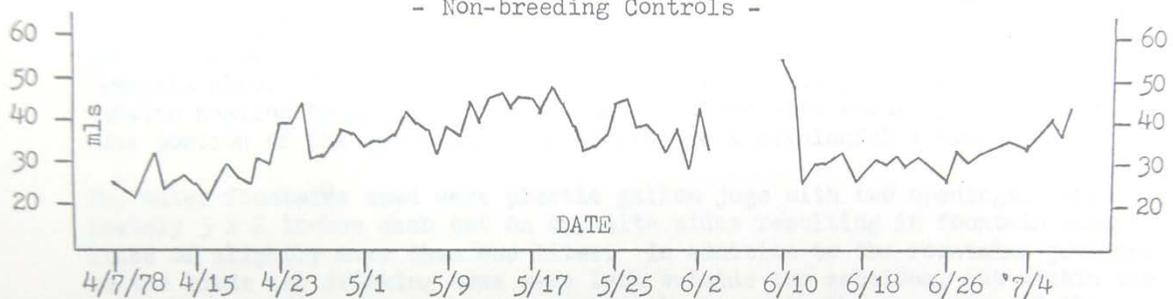
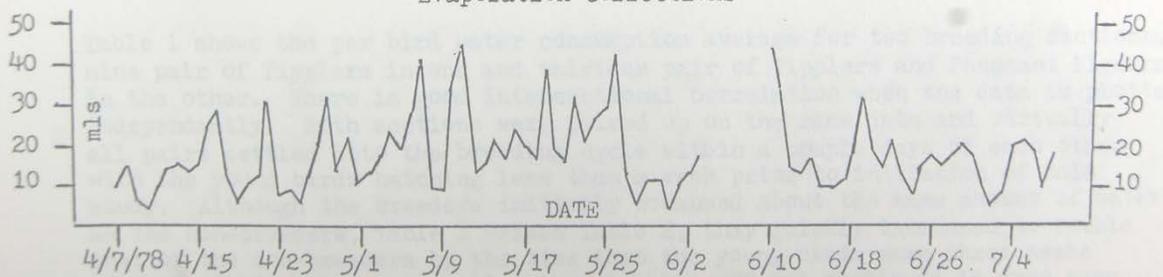


TABLE 3
Evaporation Corrections



A Comment on Tim Kvidera's "Who's Your Daddy" Article

One of Its More Subtle (and Disturbing?) Implications

Submitted by - G. B. Peterson

In the Summer 2015 issue of the MSPA Newsletter, Tim Kvidera explained how the appearance of a youngster with the trademark phenotype of a dominant gene that neither of its "parents" carries is a near-certain sign that the cock bird of that pair is not the real daddy of that youngster. As Tim noted, barring the extremely unlikely possibilities that a spontaneous mutation is responsible or that one of the parents actually has that dominant gene but doesn't show it due to incomplete penetrance, it is virtually certain that the real daddy is another cock bird in the loft that does carry (and shows it) the gene for that dominant trait. As Tim also noted, there are many examples one could give of this state of affairs. The example he gave was a pair of blue bars who hatch a grizzle youngster. A pair of non-grizzle blue bar pigeons cannot produce a blue bar grizzle offspring. If they do hatch one, it is 99.999999% certain that the blue bar father is not the father but that a grizzle cock in the pen, say, a blue grizzle or a tortoiseshell or an ash-red grizzle that carries blue, must have mated with the hen and fertilized that particular egg. It is true that pigeons are, for the most part, monogamous, but this is more true when it comes to incubating the eggs and raising the babies than it is when it comes to the sex act itself. There is more hanky panky in that department than we are often willing to acknowledge, and if you breed your pigeons in a community loft, you know what I mean. Moreover, those "unauthorized" matings no doubt frequently result in the daddy who incubates the eggs and feeds the youngsters not being the daddy who provided the genetic material. Such is life.

Tim went on to point out that the appearance of a dominant phenotype youngster in the nest of a pair that does not contain that dominant gene is not the only way one can spot illegitimacy. If you know that the cock bird of the pair-of-record does NOT carry a specific recessive gene (such as recessive red), but you find a youngster bearing that recessive trait in his nest, then you can be sure that, again, there's a different cock bird lurking around somewhere in the loft who does carry that recessive gene and is the actual biological father of the youngster. Tim noted some other subtleties that one must be mindful of in establishing paternity in surprising cases, but his basic point was that a good knowledge of pigeon color genetics is a very good thing to have when it comes to knowing "who's the daddy."

One way to summarize the main point that Tim made is to state it as a kind of rule: *given the known genotypes of both parents, the appearance of a genetically impossible phenotype in a youngster in the nest of those birds is a sure sign of illegitimacy.* The point that I want to make in this follow up comment to Tim's piece is that, although the above rule is most assuredly true, the converse of that rule is NOT necessarily true. Specifically, the converse of the above rule would be: *given the known genotypes of both parents, the appearance of a genetically possible phenotype in a youngster in the nest of those birds is a sure sign of legitimacy.* In a community breeding loft situation, that version of the "rule" **cannot** be taken as true.

We can use Tim's example of the blue bars with the grizzle baby to make this point. Assume this pair of blue bars hatches two youngsters, one a blue bar, as expected, but the other a blue bar grizzle. Whoa! From our knowledge of pigeon color genetics, we immediately recognize that it is impossible for a pair of plain blue bars to produce a blue grizzle, and so we correctly conclude that the true daddy must be a grizzle cock who took advantage of our sweet little blue bar momma hen. But now, what about the nest-mate to our illegitimate blue grizzle baby, the little plain blue bar? Can we safely assume that it is the true offspring of our plain blue bar cock bird? I think our natural tendency is to say yes, we can, but the fact of the matter is that no, we cannot. It is entirely possible, for example, that our plain blue bar baby is also the offspring of the same grizzle cock bird that bred the hen to produce the grizzle baby. We already know that that grizzle lothario, whoever he is, must also carry the blue color gene and the bar pattern gene because the grizzle baby he sired is a blue bar grizzle. The color, pattern, and grizzle genes all segregate independently. Therefore, it is completely within the realm of possibility that the cock that sired the blue bar grizzle baby sired the plain blue bar baby as well; he just didn't contribute his grizzle gene that time, only his blue and his bar genes. Who's your daddy indeed!

In a community loft situation, it is true that we can use our knowledge of color genetics to definitively identify *illegitimate* babies, but the converse is not true: we cannot use our knowledge of color genetics to definitively identify *legitimate* progeny.¹ The fact that the phenotypes of the youngsters in a nest are consistent with the genotypes of the birds that hatched them does not constitute proof that those youngsters are, in fact, the legitimate progeny of that pair, most particularly the offspring of the cock bird of the pair. There is just no way around it: the only way to be absolutely certain of paternity in the pigeon breeding game is to have the breeders housed in their own private breeding compartments. Feeders, of course, can be in a community situation, but if you really, really want to be sure "who's your daddy", individual breeding compartments is the way to go.

¹ I hasten to add that it would be quite possible to put together several pairs in a community breeding loft situation in such a way that one could unequivocally identify the sire of each and every youngster produced, legitimate or illegitimate. However, it would take thoroughgoing and totally accurate knowledge of the genotypes of each and every hen and cock in the loft. It would be interesting and important, in fact, to do that, ala the Joe Quinn studies that Tim alluded to, as it would give us a way of estimating the incidence of extra-pair fertilizations in community loft setups. But, let's face it, nobody ever goes to all that trouble. Therefore, except for carefully worked out scenarios like that, it is accurate to say that the *only* way to be 100% certain of the paternity of youngsters is to put your pairs in individual breeding compartments.

Essential Vaccinations Before the Show Season

Submitted by - Ardy Prekker

All birds in your flock including feeders and non show birds should be vaccinated for Paramyxovirus 1 (PMV 1). PMV-1 is a devastating viral disease familiar to all pigeon fanciers. This virus causes serious neurological and renal disease in pigeons, and can easily be prevented by vaccination.

Another significant pathogen in pigeons is Paratyphoid (Salmonella). This bacterium has already developed significant antibiotic resistance and virulence and is able to infect a wide variety of host species. Since one natural host for Salmonella is mice (and other rodents), the threat of exposure is always lurking nearby. The best defense against the Salmonella bacterium is a vaccine. While there is some debate about the effectiveness of the vaccines I recommend a new vaccine that came to the market in 2013 called KM-1 which protects against the six most common salmonella bacteria strains. Earlier vaccines had a tendency to make birds sick and occasional caused deaths. This vaccine has shown minimal side effects and may be given to birds as young as six weeks. KM-1 contains strains from racing pigeons, show pigeons and meat pigeons; these are current strains that previous vaccines did not protect against. Each bottle will treat 100 birds at the rate of 1/4 cc. Initially the birds are vaccinated twice, 3 weeks apart and then once every six months. The only way to prevent Paratyphoid is with a long term approach of vaccination. Symptoms of Paratyphoid may include twisted neck(star gazing), lack of coordination, limp dropped wings, eggs not hatching, young dying in the shell or at weaning age, sudden death and in some cases none of these symptoms are present but the birds still have the disease and can pass it along to other birds. KM-1 is a killed bacterium.

I will give PMV-1 and KM-1 to babies at weaning time (about 5 – 6 weeks of age) or as they are ready to leave the nest and I booster them 4 to 6 weeks later. My old birds I do in the fall (their booster shot) four to six weeks after I pluck the tails and necessary flights in preparation for the upcoming shows. You don't want to give these shots while their molting or regrowing plucked feathers as it can cause the feathers to not develop properly. With the PMV- 1 you will need to give a booster every year and with KM-1 you will need to booster every six months. This is my practice but you can always follow your Veterinarians instructions.

Never vaccinate sick pigeons, this will cause a pigeon to become even more ill, and the pigeon won't get enough power to build up a strong immunity against the disease for which you have vaccinated, this means that the vaccine won't work properly. Never vaccinate during an important period, such as the show season, the breeding season or during the molt. Make sure you have a minimum interval of 1 month between the date of vaccination and the start of that period, so you won't have any negative influence due to the vaccination. Never vaccinate with medication that has not been stored under the right circumstances or that is expired. There are a number of excellent "how to" videos on You-Tube that illustrate and demonstrate the vaccination process. The following link is one of the best in my opinion. <https://www.youtube.com/watch?v=ZYCJ3BLx0sE>

Common Drugs and Dosage Used in Treating Pigeons

Submitted By Ardy Prekker

While I am not an advocate of using antibiotics on a regular basis as a preventative or a cure-all for every perceived ailment there are situations where they can be absolutely necessary. Establishment of a proper diagnosis before treatment begins is extremely important. Shotgun treatment often produces poor results, delays recovery to when the proper drug is finally found, and often produces drug-resistant bacteria and parasites. I cannot stress strongly enough, in the case of antibiotics, that a culture and sensitivity be done to make sure the antibiotic used is needed and effective. Just because a drug is noted to be effective against many cases of salmonella infection doesn't mean it is effective against all cases. More and more drug-resistant bacteria occur every day and can best be treated when proper diagnostics are used first. The following table is one I keep close but it is not my work it is taken from Formulary prepared by the "Association of Pigeon Veterinarians"

Credits

Special thanks to:

David E. Marx, D.V.M.

Golden Valley Pet & Pigeon Clinic, 2702 NW 60th Avenue

Norman, OK 73073

1-900-737-MARX

Dosage Range

Many of the drugs give you a dosage range. This is done for 2 reasons:

1. The lower dose may be used in mild infections but the higher dose may be needed in more severe infections.
2. Since most drugs are given in the water, the amount of the drug a pigeon gets varies with how much water it drinks. We assumed that in hot weather 30 birds drink a gallon (4 litres) per day and in cold weather 60 birds drink a gallon per day. The low dose is figured on the 30 bird/day consumption level and the high dose on the 60 bird/day consumption level. This is a very important principle to keep in mind with the more toxic drugs such as dimetridazole (Emtryl).

Dosage Intervals

It is important to give the drug for the proper length of time. Failure to do so often results in poor response, relapse of the disease after the drug is stopped, and production of resistant strains of organisms.

Measure Conversion

Measurements and Equivalents

| | |
|-------------------------|----------------------|
| 1 gram | 1000 milligrams (mg) |
| 1 cubic centimeter (cc) | 1 milliliter (mL) |
| 5 cc | 1 teaspoon |
| 15 cc | 1 tablespoon |
| 30 cc | 1 ounce |

| | |
|----------|----------|
| 1000 cc | 1 litre |
| 8 oz | 1 cup |
| 2 cups | 1 pint |
| 2 pints | 1 quart |
| 4 quarts | 1 gallon |

Examples of Methods to Convert Drug Dosages into Teaspoons

To treat a respiratory problem in your birds, you buy a package of antibiotic powder. The label says that the total weight of the package is 100 grams, and that each gram contains 500 milligrams (mg) of antibiotic. How do you translate that amount into teaspoons?

Example 1 : First pour out the powder onto a clean surface and with a teaspoon, measure out the number of level teaspoons of product in the package.

The label on this package of antibiotic says that each gram contains 500 mg of antibiotic. As an example only, assume you find that there are 20 level teaspoons of powder making up this package. This means that each level teaspoon contains 5 grams of product ($100 \div 20 = 5$). Now we know that each gram of product contains 500 milligrams of antibiotic, so now we know that each level teaspoon contains 2500 milligrams of antibiotic (5×500), half a teaspoon contains 1250 mg, and so on.

Assume that the correct dosage of this antibiotic for pigeons ranges from 1500-3000 mg per gallon (4 liters) for 7-10 days.

Note : the lower dose of 1500 mg is used in warm weather when the birds drink more water, and the higher 3000 mg level is used in colder weather when birds drink less.

So in hot weather, you would use a level of 1500 mg which is between 1/2 and 3/4 of a teaspoon for 4 liters of water. Depending on the season, you can use levels of this antibiotic in between the range of 1500-3000 mg in 4 liters of water.

Example 2 : You buy a 400 gram package of powder that contains two antibiotics, one of which is Chlortetracycline, also known as Aureomycin, a tetracycline-class of antibiotic; the label indicates that this 400 grams of powder contains 80 grams of Aureomycin. How many teaspoons of this powder do you use to treat a respiratory condition?

When you measure out the number of level teaspoons in this package, you find that there are 80 teaspoons of powder (this is a fictitious example only).

Since there are 80 grams of Aureomycin in 80 level teaspoons, each teaspoon contains 1 gram of Aureomycin (80 grams divided by 80 teaspoons), which is the same as 1000 mg of Aureomycin per teaspoon (see table, page 17).

The dosage of Aureomycin for pigeons is 600-1500 mg for 4 liters of water for 7-14 days. Once again, use the lower dosage during warm weather and the higher dosage

during colder weather. In this case, for practical convenience, you could use 1 level teaspoon (1000 mg) of product for 4 liters of water, a compromise between 600 and 1500 mg, during warm weather.

Note: For best results in treating respiratory conditions, it is a good idea to combine the tetracycline class of antibiotics with a full dose of tylosin as well.

Example 3: You buy an antibiotic as a liquid. One example of such a liquid is a liter of a 10% solution of Baytril. A 10% solution means that there are 10 grams of Baytril in every 100 cc. There are 20 teaspoons in 100 cc (see chart), so there is $\frac{1}{2}$ a gram ($10 \div 20$) or 500 mg of Baytril in each teaspoon. The dosage of Baytril for pigeons is 150-600 mg for 4 liters of water for 7-14 days. On a practical basis, in warm weather, you can use $\frac{1}{2}$ teaspoon (250 mg) for 4 liters of water, and in colder weather, use 1 teaspoon for 4 liters of water.

You may be able to buy a 50 cc bottle of injectable Baytril from a veterinarian. Each cc of solution contains 50 mg of Baytril. In warm weather use 1 teaspoon of drug (250 mg) for 4 liters of water; in cold weather use 2 teaspoons (500 mg) in 4 liters of water.

Antibacterial

Baytril (Enrofloxacin): This is a "best choice" for treating paratyphoid (salmonellas). Baytril is a broad spectrum antibiotic with excellent penetrance into different tissues. Dose: 5 mg per pigeon per day in divided doses; 250 mg per gallon (4 liters). When treating paratyphoid, treat for 10 days.

NOTE: Baytril tablets do not dissolve in water. Use only water-soluble liquid when flock treating in water. Tablets are fine for individual bird treatment - $\frac{1}{2}$ of a 15 mg tablet twice daily.

SaraFlox (Sarafloxacin hydrochloride): Similar to Baytril, it is available as a water-soluble powder marketed for poultry. Available in 5.1 oz (15 gm) packets.

Dose : 1 tsp per gallon (4 liters).

Amoxicillin : An excellent broad spectrum antibiotic. Often good against Salmonella, E. coli, Strep. & Staph. species of bacteria.

Dose : 50 mg per pigeon per day in divided doses. 3 grams (3000 mg) per gallon (4 liters). Treat for 5-10 days.

Cephalexin : Another excellent broad spectrum antibiotic. Use like amoxicillin; it has a slightly broader anti-bacterial spectrum than amoxicillin. Dosed same as amoxicillin.

Trimethoprim/sulfa : A good combination product, when bacteria are sensitive to it. We are seeing more resistant bacteria to this drug.

Dose : 30 mg per pigeon per day – 1500 mg per gallon (4 liters) for 7-14 days.

Nitrofurans (NFZ, Furacin, etc.): A broad spectrum antibacterial, with some anti-coccidial properties. Seems to work better in a test tube than it does in the pigeon. Not one of my favorites, but sometimes useful.

Dose : 1 tsp NFZ per gallon (4 liters) for 5-7 days.

Erythromycin (Gallimycin): A narrow spectrum antibiotic. Use limited to respiratory infections, especially those caused by Mycoplasma species. Difficult to achieve blood levels because crop bacteria break it down readily.

Dose : 50 mg per pigeon per day - 1.5 to 3 grams per gallon (1500 - 3000 mg per 4 liters of water) for 7-10 days.

Lincomycin : Similar to Erythromycin. Same dosage.

Tylosin : Similar to, but generally more effective than Erythromycin and Lincocin. Dosed same as Erythromycin. It is very effective against coryza (respiratory infections) when combined with tetracyclines (use a full dose of each).

Tetracyclines [Tetracycline, Chlortetracycline (**Aureomycin**);

Oxytetracycline (**Terramycin**): Most effective against respiratory infections - especially when combined with tyrosine. Occasionally these antibiotics will control more serious infections - but only a low percentage unless an antibiotic sensitivity has confirmed their effectiveness.

Dose : 60-75 mg per pigeon per day – 600 -1500 mg per 4 liters for 7-14 days.

Doxycycline : Another tetracycline - listed separately because birds eliminate it more slowly, allowing for less frequent administration and lower dosages.

Dose : 10-50 mg per pigeon per day – 500 -1000 mg per 4 liters of water. Excellent antibiotic.

NOTE: When using tetracyclines, remove calcium sources such as grit, oyster shell, mineral, etc., since the calcium ties up the drug and makes it unavailable.

Coccidiostats

Amprolium (Corid, Amprol): An excellent drug of choice for coccidiosis. These drugs must be used for 3 to 5 days to be effective. Avoid using vitamins while treating, but use them for 1-2 days after treatment is finished. Dose: 1 tsp (20% powder) per gallon.

Toltazuril (Baycox): A very potent coccidiostat. Not yet approved in USA.

Dose : 1 ml per liter (4cc per gallon –100 mg per gallon) for 2 days.

Sulfonamides : Some sulfas are more effective than others. Sulfadimethoxine is probably the most effective. Dose: Use for 5 days. 1250 mg per 4 litres.

Drugs used against Trichomonas (Canker) and Hexamita

All these drugs, except **Spartrix**, must be administered for 3-5 days or more in the drinking water; although **metronidazole** (**Flagyl**) can be dosed individually for 1-2 days and is at least as effective as **Spartrix**. **Ronidazole** (**Ridsol**) is the safest product (more is needed to produce toxic effects). Overdose of **Emtryl** or **Flagyl** can occur more easily. Toxic levels produce central nervous signs which usually reverse after discontinuance, but can result in death.

Dimetridazole (**Emtryl**): 3/4 tsp per gallon (4 litres) for 5-7 days (Canadian Emtryl – 40% water-soluble powder). You can use this dosage for 1-2 days early in the week, eg. Sun-Mon, every 2-3 weeks throughout the race season.

Ronidazole (**Ridsol**): 400 mg per gallon - 2 tsp per gallon (4 liters). Use 5 days before the season and for 2 days every 2 weeks throughout the season.

Metronidazole (**Flagyl**): 25-50 mg per pigeon per day - 1250-2500 mg per gallon (4 liters) for 4-6 days.

Carnidazole (**Spartrix**): One 10 mg tablet per pigeon preferably on empty crop. Not as effective as treatment in drinking water.

Antimalarials

These drugs, at the doses given only suppress Haemoproteus and are not curative. They may be curative against plasmodial malaria in pigeons. This is an acute syndrome causing acute anemia. Antimalarials must be dosed for 28 days prior to racing to fully suppress Haemoproteus. Follow up, through the races, with treatment 1-2 days each week.

Primaquine (**Aralen**) : Irregularly available. 1-2 tablets per gallon for 10-21 days before the race season, the 1-2 days weekly.

Quinacrine (**Atabrine**): 200 mg per 4 litres. 1½ - 3 tablets per 4 litres for 10-21 days, then 1-2 days each week.

Chloroquine : 500 mg per 4 litres.

The following article was initially written for publication in a Flying Tippler club bulletin. The topic is applicable to any breed of pigeons though, so here goes...

Do You Listen to Your Birds?

Submitted by – Tim Kvidera

A few years ago I did an article asking whether you watch your kit when they fly, or do you see them? Seeing is a more thorough viewing, with the goal to understand what and why the birds are doing whatever they are doing while they are in the air. Which bird is the dominant leader, how do they react to wind, terrain, weather, etc. This article will be a spin off from that, but more down to earth.

A loft of healthy birds is typically a hive of activity. Birds cooing, moving about, youngsters squeaking for food and the like. All these are normal and we come to accept them as natural background "white noise" in the loft.

While in the loft do you hear any coughing, sneezing, wheezing or the like? If so, time to find the source and attend to the bird/s with proper medication. Bird repeatedly stomping its feet? Check for parasites. Hear a sharp grunt? Something threatening has been detected by one of the birds. You came too close, you brought in a visitor that they are not familiar with, dog/cat came too close to the loft, etc. Time to determine what alerted the bird and take appropriate action.

The birds do not always use audible signals to communicate with you. Just like humans have developed sign language for the mute to "talk," so do the birds use signals that one ought to pay attention to and understand to ensure things are always made right.

Assuming that you do not have feed continuously available, it is normal for the birds to get more active, fly to and hang on the loft section door, etc. when they are hungry and think that you are there to feed them. Birds do not have to look glassy eyed to get the point across that the water dish has gone dry. If they have food and water yet still indicate something is missing, time to check the grit bowl. If you feed a mixture of grains, watch to see what they are eating and in what order. They know better than we what they really need. Adjust the blend based on their needs. It will be different in summer than winter, breeding season verses off season. In the breeding season pairs will want things different based upon the stage to the nest (age of the youngsters). Same can be said for kit birds. But here, you may want to override their desires to accommodate your feed-up regimen.

Got birds on the roof? Are they relaxing, enjoying basking in the sun or chasing tossed feed? Or are they on alert? If one or more is/are intently looking in a given direction, you ought to be too. The birds have detected something out of the ordinary. Could be a circling hawk, approaching cat or somebody entering the yard. They have a very discerning eye. They soon know the difference between a gull, crow, airplane, etc. and a BOP. One of the things that really spooks my birds are hot air balloons. One "benefit" of

all the housing development around me recently is there are less balloons and those that do come by are much higher in altitude.

Learn to listen to your birds and they will be better off for it.

ANSWER to the Pigeon Pedigree Puzzler:

The Ash Red Bar Hen Y is the genetic impossibility. This is because if a blue cock bird is mated to an ash red hen (as in C x D), all the cock birds produced must be ash reds and all the hens produced must be blues (assuming that at least one member of the C x D pair is NOT carrying recessive red). This is because the genes for color (ash red, blue, or brown) are located on the sex chromosomes. In pigeons, cocks have two sex chromosomes, hens only one. Therefore, because hen D is ash red, we know that ash red is her one and only color gene. We also know that cock C is not carrying ash red because, if he were, he would be ash red, as ash red is dominant to both blue and brown. C is blue. Therefore, his two color genes are either both blue or one is blue and the other brown (blue is dominant over brown). Because cock birds have two sex chromosomes, they always give one or the other to each and every youngster they produce, both cocks and hens. If a hen contributes her sex chromosome to a youngster, then that youngster will be a cock bird, having received a sex chromosome from each parent. If a hen does not contribute her sex chromosome, then the youngster is a hen, having received only one sex chromosome, and that from the sire. Pigeon Y is a hen, therefore she has only one sex chromosome and it came from her father (whoever he might have been). C could contribute either blue or brown, but not ash red. Thus, C could never have produced an ash red daughter. Therefore, Y cannot be C's daughter. It is a genetic impossibility.



