

ID	When	What	How	Why
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The Young Bird System of Shewmaker Genetics

This is the program we use for racing young birds at Shewmaker Genetics. Some of the ideas are our own and others have been gleamed from other fanciers. The presentation here is copyrighted and may not be republished in any format (internet, video, book, magazine, etc) without written permission. However, we provide it to our clients and individual fanciers in the sport for their own personal use. We use it in Northern California, US and so the dates may need to be different in other parts of the world. We modify it from year to year and you may find areas you wish to modify as well. One of the key concepts of the program is that the young bird team starts the race season with a full and complete moult of body and flight feathers.

1.0 Breeding

Concept: The system works best with youngsters born early (prior to February 15th). Youngsters are hatched into an environment with at least 18 hours of light per day (but NOT 24 – they need a period of dark each day). In order to achieve two rounds (which is helpful in raising a sufficient number of birds for the team) the laying of the breeders must be well synchronized with all of the pairs laying within a few days of December 12th for the first round.

1.1	September 1 st	All pairs broken up no later than this date	<ul style="list-style-type: none"> • See Breeding Procedure for complete details on breeding 	<ul style="list-style-type: none"> • Breeders must have time for moult and proper preparation for the next breeding season
1.2	November 12th	Vaccinate breeders	Minimum: <ul style="list-style-type: none"> • PMV • Paratyphoid If available: <ul style="list-style-type: none"> • Circovirus • Herpes • Adeno 	<ul style="list-style-type: none"> • Vaccines produce antibodies in the breeders which are passed to the chicks through the egg (hen contribution) and pigeon milk (cock and hen contribution). • The antibodies take 30 days to develop so the vaccinations need to be done 30 days before egg laying to be most effective. • The health implications of this step are very important for the health of the young birds during the critical age of 4 to 10 weeks.
1.3	November 12th	Make sure breeders are on a probiotic		<ul style="list-style-type: none"> • This should be the case all year, but it is absolutely essential for breeding. A balanced gut flora for the breeders will help insure the gut flora of the babies gets started properly. • The health implications of this step are very important for the health of the young birds during the critical age of 4 to 10 weeks.
1.4	November 20th	Start breeders on 20 hours of light per day		<ul style="list-style-type: none"> • Triggers hormones fo breeding • Helps synchronize egg laying

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				<ul style="list-style-type: none"> The system requires that the young birds be born into an environment which has at least 18 hours of daylight (but NOT 24)
1.5	November 25th	Pair breeders	<ul style="list-style-type: none"> Increase protein in feed to flush the birds (simulates Spring and helps get the hens laying). This can be accomplished by increasing the % protein in the diet and/or increasing the amount of feed given each day. Be careful not to over feed as the breeders should not be fat and over weight. In our flock, we go from 16% protein (during the moult) to 14% protein after the moult and for this step increase back to 16% protein along with an increase of 25% in the amount fed daily. 	<ul style="list-style-type: none"> This system requires birds that are hatched prior to February 15th. In order to race two rounds, the first round must be synchronized to hatch very close to January 1st
<p>2.0 Weaning</p> <p>Concept: The youngsters need to be weaned and started as soon as possible but with a minimum of stress. They are placed in a comfortable environment where food and water are easily found.</p>				
2.1	28 days	Wean	<ul style="list-style-type: none"> Wean to cage with water (containing probiotic and electrolytes), heat pad, free choice former feed,(breeder ration) and free choice new feed (grower ration) 	<ul style="list-style-type: none"> Do not allow late weaning – they need to get started early Weaning to a cage makes feed and water easy to find Heat pad plus former food reduces stress New feed is introduced to hasten the change over
2.2	28 days	Document	<ul style="list-style-type: none"> Record band, parents, color, sex, grade, flying range, plans in record system 	
2.3	28 days	Apply colored snap band	<ul style="list-style-type: none"> Sex band to right leg (hen = pink, cock = blue) when apparent Contemporary Group (CG) band to left leg Double band CG for stock candidates 	<ul style="list-style-type: none"> CG snap bands make it easier to keep the CG's properly separated when training begins. Sex snap bands allow for observing behavior to confirm sex determinations over the course of the test
2.4	30 days	Move to YB loft	<ul style="list-style-type: none"> Place water bowl identical to the cage waterer 	<ul style="list-style-type: none"> Helps insure the weanlings learn quickly where

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			near YB loft waterer • Record pen location in record system	the water is located – reduces stress
3.0 Settling				
<p>Concept: This is one of the most crucial phases of the entire program. The youngsters need to get started early when they learn quickly and before bad habits are formed. However, this is also where some of the biggest losses can occur if it is not done properly. Be very thorough with each step. It is critical that the birds are not frightened by the handler. We are very cautious for this phase (we will be more aggressive in the next phase).</p>				
3.1	31 days	Equip landing board with settling cage	<ul style="list-style-type: none"> • Best arrangement is a landing board that can be "closed" with a screen (essentially making it a temporary aviary) 	<ul style="list-style-type: none"> • Allows the weanlings to see the surrounding area early on • Encourages the weanlings to quickly learn how to enter the loft from the landing board
3.2	31-34 days	Teach birds how to go out to landing board and back into the loft	<ul style="list-style-type: none"> • YB loft should have access to the landing board (but with the landing board closed) • Landing board should always have food available • Light feeding should be done AM and PM inside the YB loft • Water should only be available in the loft • Make sure at night that all of the young birds have returned to the loft. 	<ul style="list-style-type: none"> • Light feeding is done so birds that have not learned to eat in the landing board area do not miss needed nutrition • Feeding on the landing board and watering in the loft facilitates frequent in and out trips
3.3	31-41 days (10 days)	Teach the birds to trust you	<ul style="list-style-type: none"> • Spend time in the YB loft • Talk often in calm voice • Whistle when feeding (always from this point forward) 	<ul style="list-style-type: none"> • It is important that the YB's are not afraid of you • The whistle is a sound that will condition them to associate with feeding and will be used later when they land on the landing board (to facilitate quick trapping)
3.4	34 days	Vaccinate for at least PMV and Parathyphoid as well as Circovirus, Herpes and Adeno if available.		<ul style="list-style-type: none"> • The passive immunity provided by the parents is diminishing. The immune system of the young birds is now able to produce antibodies. • The vaccinations provide protection for the young birds.
3.5	34-41 days	Place birds on closed	<ul style="list-style-type: none"> • For this step all feeding is done on the landing 	<ul style="list-style-type: none"> • Making sure every bird knows how to enter the

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	(7 days)	landing board each morning and evening	board (no feed in the loft) <ul style="list-style-type: none"> • Close off access to the landing board each night so birds are hungry in the morning and will eventually learn to go out for their AM feeding • Open access door to the landing board and hand place any who do not go through on their own • Once they are all on the landing board, close the access door (loft to landing board) 	loft from the landing board
3.6	42 days	Worm birds	<ul style="list-style-type: none"> • Tramisol Sheep Drench in the drinking water for 24 hours at the dose recommended on packaging. • Repeat in 10 days to deal with worm eggs that are not effectively treated with the first application but then hatch. • Reworm periodically as needed. I do once a month until the end of the race season. 	<ul style="list-style-type: none"> • Do not use it in the bath. It wasn't designed to be applied this way and you are not giving the birds the right dose. • Tramisol is an excellent wormer and is effective for all but tape worms. If you have a problem with tape worms you will need to use another wormer for these.
3.7	42-45 days	Place birds on open landing board each morning and evening	<ul style="list-style-type: none"> • For this step all feeding is done on the landing board (no feed in the loft) • Close off access to the landing board each night so birds are hungry in the morning and will eventually learn to go out for their AM feeding • Open access door to the landing board and hand place any who do not go through on their own • Once they are all on the landing board, close the access door (loft to landing board) • When they return to the loft they will be locked in until the next feeding. 	<ul style="list-style-type: none"> • This is the first opportunity for some of the more bold youngsters to leave the landing board. • Most won't leave on the first day, but the few who do will likely return soon • By the third day, most if not all should be leaving the landing board to fly a bit and then returning to the landing board.
3.8	46-48 days	"Toss" the birds from six feet for their morning and evening feeding	<ul style="list-style-type: none"> • Place birds in crates six feet from the landing board at the level of the landing board and drop the side flap • Idea is that the birds will hop to the landing 	<ul style="list-style-type: none"> • This step may not be necessary if the birds have learned to fly off and return to the landing board in Step 3.6.

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			board and eat. Landing board remains open but with the loft to landing board access door closed.	
3.9	49-50 days	"Toss" the birds from forty feet for their morning and evening feeding	<ul style="list-style-type: none"> Place birds in crates on the ground but within sight of the landing board and drop the side flap. Access door (loft to landing board) is closed so that once the birds return to the loft they can not go out again 	
<p>4.0 Training Phase 1</p> <p>Concept 1: The objective of this phase is to get the birds as thoroughly trained as possible before the body moult occurs in early June. Do not be afraid to get them down the road. I routinely get my birds to 60 miles by 60 days of age with great success. A less aggressive goal of 90 miles by 90 days is really quite easy if you plan well from the beginning. My first two young birds a few years ago were just 100 days old for the club 200 mile Young Bird race and came home in excellent race time. Remember it is the early lessons we are trying to firmly establish.</p> <p>Concept 2: The emphasis in this phase of training is to try to minimize group flying. There will be plenty of time in the "Training Phase 2" to get the team to fly together on race day. At this time we want the birds to have to think on their own and not just get into a habit of following the leaders of a large group home on each toss.</p>				
4.1	51 days	Inventory birds	<ul style="list-style-type: none"> Hand catch the birds and basket them. Record band numbers and update the inventory, indicating which birds have been lost off the loft during settling. 	<ul style="list-style-type: none"> You are looking for patterns of which matngs have an unusually high rate of losses off the landing board – we don't want these and unless their siblings wind up really excelling later on during the YB season, we change these matings and/or cull the parents
4.2	51 days	Toss 1 – 50 yards	<ul style="list-style-type: none"> Access door (loft to landing board) is closed so that once the birds return to the loft they can not go out again Morning feed is placed in feeder on the landing board Release birds individually from 50 yards from a point out of sight of the loft 	
4.3	52 days	Toss 2 – 50 yards	<ul style="list-style-type: none"> Follow these steps for all tosses going forward: <ul style="list-style-type: none"> Load the birds into the shipping crate 	<ul style="list-style-type: none"> Releasing the birds individually helps to delay their natural tendency to fly as a group. We do

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			<p>through the loading isle using a broom</p> <ul style="list-style-type: none"> • Handle each bird (picking them out of the shipping crate) looking for injuries and general fitness. Record any losses from previous toss and record any previous losses that have returned • Close the access door (loft to landing board) so that once the birds return to the loft they can not go out again • Place feed in the loft (adjust based on condition, but generally 1 oz per bird per day – 60% in AM and 40% in PM) • Release the birds individually 	<p>this for two reason: 1) to get them to think on their own and 2) to try to avoid getting them into the bad habit of wanting to fly in a large group.</p> <ul style="list-style-type: none"> • Our shipping crate is specially made to allow us to remove birds easily from the top. We do not want to be grabbing the young birds in the lofts this frightens them and makes them afraid of the handler. If they are picked up in the shipping crate though there is no problem.
4.4	52 days	Toss 3 – 1 mile South		<ul style="list-style-type: none"> • The geographical directions I cite are the ones I use. You can start with any direction you want as long as you vary them. We are trying to get the young birds to think and not just get into the habit of mindlessly following the flock home. • Eventually you will want to train them to fly together as a group, but early on the emphasis is to encourage them to think individually. So I do single tosses (or small group tosses of 3 to 5 birds) as long as I can. • The interval between individual tosses can be very short (15 seconds) – just don't release them in groups. Some will join up, but this approach will give them all an opportunity to think on their own and the pay back for this will be significant later on in the season.
4.5	53 days	Toss 4 – 2 miles South West		<ul style="list-style-type: none"> • When weather does not permit a toss, simply leave the birds in the loft or let them out for a loft flight if possible. The schedule illustrated in

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				<p>this procedure assumes the weather is fine every day for training, but of course this will probably not be the case. The sequence is what is important, not the exact calendar days.</p> <ul style="list-style-type: none"> • Also, if you have a bad toss with poor returns, I generally repeat the toss the next day. This allows the birds who came home to stay sharp and at the same time it gives an extra day for the ones who got lost to come home and recover before having to go to the next release point. • This is the balance you need to strike – be fair but be demanding.
4.6	54 days	Toss 5 – 5 miles East		<ul style="list-style-type: none"> • The jumps in distance specified in this procedure are very aggressive and are designed to both train the birds to think and to select for smart birds. You can be more conservative if you like by doing smaller jumps and repeating the distance several times until you are comfortable the birds are ready. • If your schedule permits, the birds can be let out each afternoon for a loft flight. It is very important that they never be allowed to just sit around on the roof or on the landing board. Once training begins, they should be in the air or in the loft. This is very important!
4.7	55 days	Toss 6 – 5 miles West		
	56 days	Toss 7 – 5 miles South		
	57 days	Toss 8 – 5 miles North		

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	58 days	Toss 9 – 10 miles East		
	59 days	Toss 10 – 10 miles West		
	60 days	Toss 11 – 10 miles South		
	61 days	Toss 12 – 10 miles North		
	62 days	Toss 13 – 15 miles East		
	63 days	Toss 14 – 25 miles West		
	64 days	Toss 15 – 40 miles East		
	65 days	Toss 16 – 40 miles South		
	66 days	Toss 16 – 40 miles North		
	67 days	Toss 16 – 40 miles West		
	68 days	Toss 17 – 60 miles East	<ul style="list-style-type: none"> • At this point I begin training along the path that I want them to fly during the race season (which is East for me). • Realize that birds tend to follow geographical features such as roads, raillines, rivers, etc so factor that into the course path that you design. • If you have to compete with flyers whose birds fly a route different than the one you want (in my case this means I want my birds to come down Highway 50 and not Highway 80), then 	

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			avoid traing on that other route (Highway 80 in my case).	
	69 days	Toss 18 – 60 miles East		
	70 days	Toss 19 – 60 miles East		
	71 days	Toss 20 – 60 miles East	<ul style="list-style-type: none"> • At this point they should be taking about an hour and fifteen minutes to get home and they should all be coming in a fairly narrow time range. • This 60 mile station will now become our Tuesday and Thursday release points. We will loft fly for one hour every evening and the mornings of Sunday, Monday, Wednesday and Friday. Saturday will be "race" day. And will be the distance indicated for the remaining tosses. • If you have a hawk problem, it is best not to loft fly, but to take the birds out 20 to 30 miles and release them. 	
	Week 13	Toss 23 – 100 miles East		
	Week 14	Toss 26 – 125 miles East		
	Week 15	Toss 29 – 150 miles East		
	Week 16	Toss 32 – 200 miles East		
	Week 17	Toss 35 – 125 miles East		
	Week 18	Toss 38 – 150 miles		

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		East		
	Week 19	Toss 41 – 200 miles East		
	Week 20	Toss 44 – 125 miles East		
	Week 21	Toss 47 – 150 miles East		
	Week 22	Toss 50 – 200 miles East		

5.0 Body Moul

Concept: Up until now the birds have been on the light system which promotes a rapid moult of the flights. By stopping the supplemental lighting (and going with the natural daylight) on May 10th, the birds will experience a decrease in the hours of daylight (from 20 to 14 hours a day where I live) . This is simulating the fall season and about 30 days later the birds will go into a heavy body moult. We are essentially now going onto the dark system, but we are able to achieve it without having to manually darken the loft (hence avoiding the labor aspect as well as having better loft ventilation). You will almost certainly not be able to maintain the schedule to this point due to weather and other conditions. You may use the time from May 10th to approximately June 10th when the feathers begin falling to catch up. Should you be fortunate enough to be on schedule, keep repeating Week 20 until the body moult starts. Once that happens we will essentially let the birds rest until the moult is near completion and then we will "retrain" them (they will seem to forget most of what they have learned, but it will come back very quickly). This "retraining" phase is actually very good. Just like "early lessons" are valuable, so too are "lessons relearned".

	May 10 th	Turn off artificial lighting	<ul style="list-style-type: none"> If the loft is not naturally well lighted, it is good to continue to keep the lights on, but in sync with the outside daylight. This will help with keeping the wing moult progressing. 	<ul style="list-style-type: none"> The reduction in light simulates the coming of Fall and triggers a body moult. You are now on the "Dark System" without the need to manually darken the loft.
		Vaccinate for Pox plus booster vaccinations for PMV and Paratyphoid (and Circovirus, Herpes and Adeno if available)		<ul style="list-style-type: none"> Helps further strengthen the immune system and specifically helps protect the birds from Pox, PMV and Paratyphoid which are diseases that they will likely be exposed to once they begin racing with birds from other lofts.
	June 10 th	Stop training		<ul style="list-style-type: none"> Once the body feathers start moulting the birds

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				are just not going to feel like flying. If you don't have a hawk problem you can loft fly to keep them in shape. However if hawks are a problem it is OK to just keep them in the loft for the 30 days it takes for the body feathers to moult.
	June 10 th	Separate the sexes	<ul style="list-style-type: none"> • Cocks and hens should be placed in their own pens and kept separate. • Watch daily for behaviors to identify any you have incorrectly sexed. • Place a blue snap band on the cocks and a pink snap band on the hens. This will be helpful later when you start training again to keep the sexes separated after the training tosses. Instead of snap bands I use "EZ" elastic bands (sold by Siegels). I put one on to identify the sex and then I put a second one on when I have confirmed the sex (i.e. by observation of behavior). DNA sexing is now available and I am considering it for next year as an accurate separation of the sexes is important for motivation in the races. 	<ul style="list-style-type: none"> • Motivation is key in racing. Separating the sexes at this point greatly aids in determining the sexes correctly as mistakes will show up as birds pair or strut.
	June 10 th	Cut 9 th and 10 th flights	<ul style="list-style-type: none"> • Do this only if the wing moult has not progressed far enough. Generally birds on this system hatched in January will not need this step. 	
	June 17 th	Pull 9 th and 10 th flights		
6.0 Training Phase 2				
<p>Concept: From this point forward we are concentrating on preparing a race team. The young birds will have forgotten everything so start them out as if they have never been away from the loft and then progress as rapidly as they allow (which should be much faster this time).</p>				
	July 10 th	Place electronic bands on the birds		

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	July 10 th	Put lights on timer	<ul style="list-style-type: none"> • On at 2 hours before 1st light (early sunrise) and off at 2 hours after 1st dark (just past sunset). • Once the timer has been set, keep it at these settings until the end of the races. At that point the birds will be put on completely natural lighting to prepare for the yearling race season or breeding as the case may be. 	<ul style="list-style-type: none"> • Now that the body moult is complete we want to hold it for the duration of the young bird racing season. As the days shorten we run the risk of a second body moult if we don't do this step. Also the longer daylight hours mimic spring and encourage sexual behavior critical for moitivation. • In the past I have set the timer at on with the 1st light and off at 1st dark, but experienced motivation problems in 2017. After careful consideration, I came to realize my methods were making a istake in that I was leaving them in what they perceived as winter. Changing it to lights on 2 hours earlier and off 2 hours later puts them back into a mindset of "Spring". I verified this works later in the 2017 YB season.
	July 10 th	Re-train	<ul style="list-style-type: none"> • The actual start date will vary, but this is a good approximation of when the birds will be ready to begin "re-training". 	
	July 10 th	Loft fly	<ul style="list-style-type: none"> • For all tosses going forward: <ul style="list-style-type: none"> • Let them out and set the trap so once they go in they can not go out again. • Once they land on the landing board drive them through the trap. Use your whisle or other sound to condition them to trap quickly once hitting the landing board. • Separate the sexes after all tosses • Release the hens first and then the cocks. 	<ul style="list-style-type: none"> • Good habits the birds form now will pay huge dividends on race day.
	July 11 th	1 mile toss East		
	July 12 th	2 mile toss West		
	July 13 th	5 mile toss South		

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	July 14 th	5 mile toss North		
	July 15 th	10 mile toss East		
	July 16 th	10 mile toss West		
	July 17 th	25 mile toss South		
	July 18 th	25 mile toss North		
	July 19 th	40 mile toss East		
	July 20 th	40 mile toss West		
	July 21 th	60 mile toss East	<ul style="list-style-type: none"> • At this point I again train along the path that I want them to fly during the race season (which is East for me). • This 60 mile station will now become our Tuesday and Thursday release points. We will loft fly for one hour every evening and the mornings of Sunday, Monday, Wednesday and Friday. Saturday will be "race" day. And will be the distance indicated for the remaining tosses. • If you have a hawk problem, it is best not to loft fly, but to take the birds out 20 to 30 miles and release them. 	
	Week 30	Saturday 200 miles East	<ul style="list-style-type: none"> • Sunday bath and rest • Monday Loft fly AM and PM • Tuesday AM 60 miles East, PM Loft fly • Wednesday Loft fly AM and PM • Thursday AM 60 miles East, PM Loft fly • Friday Loft fly AM and PM • Saturday AM 200 miles 	
	Week 31	Saturday - Release from the site of the 1st Race	<ul style="list-style-type: none"> • Sunday bath and rest • Monday Loft fly AM and PM • Tuesday AM 60 miles East, PM Loft fly • Wednesday Loft fly AM and PM 	

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			<ul style="list-style-type: none"> • Thursday AM 60 miles East, PM Loft fly • Friday Loft fly AM and PM • Saturday AM 1st race site 	
	Week 32	Saturday - Release from the site of the 1st Race	<ul style="list-style-type: none"> • Sunday bath and rest • Monday Loft fly AM and PM • Tuesday AM 60 miles East, PM Loft fly • Wednesday Loft fly AM and PM • Thursday AM 60 miles East, PM Loft fly • Friday Loft fly AM and PM • Saturday AM 1st race site 	

7.0 Racing

Concepts:

Feed – Sets up the birds for optimized energy and electrolytes for the race and quick recovery after the race. In addition to a grain diet, grit and water racing pigeons must have the right vitamins and minerals. There are many different commercial programs available and most are well thought out and valuable. However, unless you know what you are doing, it is just not a good idea to mix and match or to incorporate every new additive you hear about. Pick a program and stick with it for the season. The programs I have used in the past which I like are Comed, De Weerd and Herbots. The program used here is based primarily on Comed products, but there are a few others that I have added. **I share it here to be complete, but again, I recommend you pick one company's program and start with that before following my implementation or inventing your own.** Remember, the feed ration for a non-racing bird (such as a resting stock bird) are **very** different from those of a racing bird. Think of it like this; if you were a world class marathon runner you would not stop at McDonalds for your pre race meal any more than you would have a feast such as you might have for Thanksgiving. Instead you would have a carefully thought out series of meals leading up to the race that would be designed to give you the optimum nutrition for the race you plan to run. To be clear, we are talking nutrition, not drugs or performance enhancing chemicals.

Health - Birds must be healthy going into the races and before being exposed to other birds. I do not use medications as a preventative practice (instead only using them when there is an identified problem), preferring instead to 1) promote a vibrant and healthy immune system and 2) perform frequent monitoring of crop, fecal and blood samples. Whatever your approach, they **MUST BE HEALTHY.**

Condition & Training – Birds must be trained **and** conditioned prior to the start of the actual races, but condition must also be maintained during the race season.

Motivation – Birds that are motivated race significantly better than birds that are just coming home.

7.1	Five days before the first comingling of the race team with birds from	<ul style="list-style-type: none"> • Dip birds in Permethrin solution • I experimented in 2017 with a new product called 	<ul style="list-style-type: none"> • To a bucket of warm water add 1/4 ounce of Dawn detergent (acts as a wetting agent). • Then add Permethrin at the rate of 10-20 ml/liter (Source: Colin Walker). For a 5 gallon bucket filled with 4 gallons of water I use 240 ml 	<ul style="list-style-type: none"> • The dip will kill any external parasites that they birds may have, but more importantly it will "coat" them for protection for up to 4 weeks. • This "coating" will help keep the team from picking up external parasites from comingling
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	<p>other lofts (in my case the basketing for the first race).</p>	<p>Tollisan Vermin U200 which claims to provide a 365 day protection for external parasites. It recommends a single drop placed on the pigeon's skin. It seemed to work well and as I write this (six weeks after applying it) the birds are still feather mite free with no apparent negative impact on racing performance. It may be possible that this can replace the Permethrin treatment going forward.</p>	<p>of Permethrin.</p> <ul style="list-style-type: none"> • Can be repeated during the race season if desired or needed. Be sure to do it on Sunday (based on a Friday shipping schedule). There is a smell the dip leaves and I don't like to do such a thing just before sending them to a race. 	<p>with birds from other lofts (i.e. basketing).</p> <ul style="list-style-type: none"> • This is most important with respect to the pigeon fly. This parasite can introduce pigeon malaria in areas where this can occur (mine is one such area). • The reason it is so important is that birds with pigeon malaria will appear healthy but tire quickly (meaning they will be late or get lost). We would really rather never have to deal with it and since there often seems to be at least one flyer who doesn't control pigeon flies properly, this is a highly recommended preventative step.
<p>7.2</p>	<p>Daily for 30 days prior to the first race</p>	<p>Beet Extract</p>	<ul style="list-style-type: none"> • Stamox in the water (1 teaspoon per liter) • Once the 30 day treatment has been done, it will be used once weekly during the racing season. 	<ul style="list-style-type: none"> • Has been shown to improve racing performance.
<p>7.2</p>	<p>Weekly</p>	<p>Some kind of nutritional additive program</p>	<ul style="list-style-type: none"> • Pick any one of the programs offered by the reputable pigeon companies and follow it for the whole season. Avoid making changes mid season. • I have used and liked the programs of 	<ul style="list-style-type: none"> • Racing is demanding of the birds. It takes a higher nutritional plane than the one for birds that are just hanging around the loft. • Modern day research has produced a more complete understanding of what is required

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			<p>DeWeerd, CoMed and Herbots. There are others as well.</p> <ul style="list-style-type: none"> • Don't mix and match unless you really have a good reason. It is better to stick with one program or the other at least the first season you try this.. • The program descibed below is the one I use and is the result of several years of tinkering. It primarily uses the Comed products plus some additions from other companies. I am sharing it "as I do it" only to be complete and transparent. Most people should instead pick a company's protocol and follow it exactly at least for the first season until they fully understand how it works. 	<p>with extreme exercise and several pigeon companies have responded with feed additive programs that address these needs.</p> <ul style="list-style-type: none"> • Remember feed additives are NOT medications. The reservations many people appropriately have against indiscriminate use of medications DOES NOT apply to the use of feed additives. • Pigeon racing is a competitive sport. This means to be competitive you must be feeding at least as well as your nearest competitor. Odds are, your best competitors are already doing this.
7.3	Daily	When putting additives in the water supply, the amount will depend on how much water the birds are drinking in a 24 hour period.	<ul style="list-style-type: none"> • At these temperatures, daily water consumption per bird will be approximately: 60 °F 70 °F 80 °F 90 °F 100 °F 30ml 40ml 60ml 80ml 100ml • For these reasons, all references below for water additives are given as dosage per 40 birds (2 liters of water = 40 birds drinking 50 ml of water daily at 75 °F). 	<ul style="list-style-type: none"> • It is important to adjust the amount of water added to the additives since birds will consume more water in warmer weather.
7.4	Daily	Comed foundation products	These are added every day. The additives listed below for each day of the race week (7.5 thru 7.12) are in addition to these daily additives.	<ul style="list-style-type: none"> • These three products are the foundation of the Comed health promotion program
		Comed Winmix Comed Curol Comed Roni	<ul style="list-style-type: none"> • 5 g per kg feed • 15 ml per kg feed • 10 g per 2 liters in drinking water 	<ul style="list-style-type: none"> • Winmix - all in one supplement • Curol - supports the immune system • Roni - probiotic for for the mucus membranes in the beak, the throat and the digestive system
7.5	Day of Return (Day 1)			<ul style="list-style-type: none"> • Replenish the birds as quickly as possible from the stress and demands they experienced on

ID	When	What	How	Why
	(Saturday)			the previous race. <ul style="list-style-type: none"> If birds come home over several days, make sure to isolate them as they arrive and give all returnees the Day 1 regimine before returning to the main loft.
		Feed - Depurative	<ul style="list-style-type: none"> Free feed – all they want Enercom (30 grams per kg feed) 	<ul style="list-style-type: none"> Small grains of the depurative feed are more easily digested which is important after the stress of the race.
		Water – Add an Electrolyte and restorative amino acids	<ul style="list-style-type: none"> Hydracom Recup Amino (30 grams per 2 liters) Hydracom Recup Gluco (20 grams per 2 liters) 	<ul style="list-style-type: none"> It is essential that the birds recover as quickly as possible from the stress of the race.
		Other	<ul style="list-style-type: none"> Individually handle each bird checking for injury Spray each bird with Purge (or alternatively dip in Permethrin once every two weeks) if not using Tollison Vermin U200 which is applied once and is said to be good for up to one year. Lysocur Eye Drops (in eyes and nostrils) 	<ul style="list-style-type: none"> Need to rid the birds of any lice or pigeon flies that they might have acquired in the shipping basket before they are introduced to the loft.
		Flying	<ul style="list-style-type: none"> Birds are left together for the day in the loft (sexes combined) with no loft flying after their return. 	
	Day 1 - dusk	Separate the sexes		
7.6	Day 2 (Sunday)	Feed – 100% Barley	<ul style="list-style-type: none"> 1 ounce per bird (35% AM and 65% PM) fed on return from loft flying. Enercom (30 grams per kg feed) * Cometose (15 grams per kg feed) * Load Pul (10 grams per kg feed for each 125 miles flown – 40 grams maximum) * Acibloc (5 grams per kg feed) *if temperature of race is greater than 77 °F. 	<ul style="list-style-type: none"> Barley provides bulk for the digestive tract and helps eliminate waste products produced during the extreme exercise of the race. Additives help with the muscle recovery.
		Water	<ul style="list-style-type: none"> Compound (40 drops per 2 liters) 	<ul style="list-style-type: none"> Additives help with the muscle recovery.

ID	When	What	How	Why
			<ul style="list-style-type: none"> Hydracom Recup Amino (30 grams per 2 liters) Hydracom Recup Gluco (20 grams per 2 liters) 	
		Flying	<ul style="list-style-type: none"> Birds may want to rest – allow for AM and PM loft flying, but do not be concerned if they come in early. Do not allow the birds to sit outside or on the landing board. They need to be in the air or in the loft. 	
		Grit	<ul style="list-style-type: none"> Good quality grit of several types is provided free choice for the rest of the week until Thursday. I also use "All in One" from Versele-Laga. Note: Grit should not be provided with some medications. If you need to medicate, check to see if grit should be withheld. 	
7.7	Day 3 (Monday)	Feed – 50% Barley 50% Race Mix	<ul style="list-style-type: none"> 1 ounce per bird (35% AM and 65% PM) fed on return from loft flying. Enercom (30 grams per kg feed) Load Pul (10 grams per kg feed for each 125 miles flown – 40 grams maximum) 	<ul style="list-style-type: none"> Barley provides bulk for the digestive tract and helps eliminate waste products produced during the extreme exercise of the race. Additives help with the muscle recovery.
		Water	<ul style="list-style-type: none"> * Hydracom Recup Amino (30 grams per 2 liters) * Hydracom Recup Gluco (20 grams per 2 liters) *if temperature of race is greater than 77 °F. 	<ul style="list-style-type: none"> Additives help with the muscle recovery.
		Other - Bath	<ul style="list-style-type: none"> Use some form of Bath Salts 	
		Flying	<ul style="list-style-type: none"> Cocks and Hens should be separately flown both AM and PM (loft fly or a 20 mile toss). 	<ul style="list-style-type: none"> Light exercise is important in the recovery from the race
7.8	Day 4 (Tuesday)	Feed – 25% Barley 75% Race Mix	<ul style="list-style-type: none"> 1.3 ounces per bird (35% AM and 65% PM) fed on return from loft flying. 	<ul style="list-style-type: none"> Beginning to increase levels of fats and carbohydrates to build reserves for the race

ID	When	What	How	Why
			<ul style="list-style-type: none"> • A good oil (I currently use Flax Seed Oil, but Comed Fine Oil is very good) is used to moisten the feed so the Spirulina powder will stick to the grain. • Spirulina is given at the rate of 1 teaspoon per kg feed. 	<ul style="list-style-type: none"> • Spirulina is given to increase the endurance of the birds during the race.
		Mineral -	<ul style="list-style-type: none"> • Top dress the grit with teaspoon of minerals (I use Natural's Vitamineral powder) 	
		Flying -	<ul style="list-style-type: none"> • Train birds 50 – 60 miles. Release the hens and one hour later release the cocks. Set up loft at home so the hens trap to their loft. Attempt to get home before the cocks and change trap over so that the cocks will then trap to their loft. • Loft fly the sexes separately in the evening. 	<ul style="list-style-type: none"> • The idea is to keep the sexes separated during the week so they can be motivated for the race by bringing the sexes together the day of shipping. • If the birds will loft fly for an hour or more (and hwks are not a problem) then this may be done instead of taking the birds out on the road.
7.9	Day 5 (Wednesday)	Feed–100% Race Mix	<ul style="list-style-type: none"> • 1.3 ounces per bird (35% AM and 65% PM) fed on return from loft flying. • A good oil (I currently use Flax Seed Oil, but Comed Fine Oil is very good) is used to moisten the feed so the Spirulina powder will stick to the grain. • Spirulina is given at the rate of 1 teaspoon per kg feed. 	<ul style="list-style-type: none"> • Continuing to increase levels of fats and carbohydrates to build reserves for the race • Spirulina is given to increase the endurance of the birds during the race.
		Flying -	<ul style="list-style-type: none"> • Train birds 70 miles. Release the hens and one hour later release the cocks. Set up loft at home so the hens trap to their loft. Attempt to get home before the cocks and change trap over so that the cocks will then trap to their loft. • Loft fly the sexes separately in the evening. 	
7.10	Day 6 (Thursday)	Feed–100% Race Mix	<ul style="list-style-type: none"> • Morning Feeding at the rate of .35 ounces per bird. • Evening Feeding – all they want and remove 	

ID	When	What	How	Why
			the feed once they roost for the evening. • * Cometose (15 grams per kg feed) *if temperature of race is greater than 77 °F.	
		Water	• StamoX (1 teaspoon per liter) • * Hydracom Iso (60 grams per 2 liters) *if temperature of race is greater than 77 °F.	
		Flying -	• Train birds 50 miles. Release the hens and one hour later release the cocks. Set up loft at home so the hens trap to their loft. Attempt to get home before the cocks and change trap over so that the cocks will then trap to their loft. • Do not loft fly in the evening.	
7.11	Day 7/Shipping (Friday)	Feed–100% Race Mix	• Birds are given all the food they want but the food is removed 10 minutes after they finish eating. • To keep them from picking out just their favorite grains, it should be feed in smaller amounts and replenished when it is cleaned up. • Feeding is done at the following time: <ul style="list-style-type: none"> • up to 100 mile race – 10AM • 100 - 200 mile race – 11AM • 200 - 300 mile race – 12Noon • 300 – 400 mile race - 1PM • 400-600 mile race – 4 hours before basketing • * Cometose *if temperature of race is greater than 77 °F. 	• It is foolish to fly birds without sufficient food. However, we don't want them to fly with a full crop of undigested food or with so much energy that they do laps for 29 minutes before trapping.
		Water	• Compound (40 drops per 2 liters) • Hydracom Iso (60 grams per 2 liters)	
		Other	• Lysocur Eye Drops (in eyes and nostrils)	
		Motivation -	• After feeding move the hens to the cock loft and	

ID	When	What	How	Why
			leave them together for the several hours until basketing for the race.	
7.12	When crating your birds in your loft	Hand dose each bird with Belgasol & Water	<ul style="list-style-type: none"> Each bird is given 3/4 ounce of Belgasol (30 ml per liter) 	<ul style="list-style-type: none"> This ensures that the birds are hydrated for shipping and it also means they are not as thirsty on the truck where they are drinking water contaminated by whatever bugs the other birds have.
		Basket the sexes separately.		
7.14	Saturday (or Sunday)	Take the birds that do not go to the race on a 100 mile training toss.		<ul style="list-style-type: none"> Keeps the birds that do not go to the race station (as race birds or as trainers) sharp and ready to be put onto the race team if an opening should arise.
7.15	Weekly	Microscopic examination of crop smears and fecal floats.	See Colin Walker's outstanding book "The Pigeon".	<ul style="list-style-type: none"> We only want to treat the birds with antibiotics when there is a problem. To achieve the right balance, constant surveillance is necessary.
7.16	Periodically during training and the race season	Laboratory Diagnostics	<ul style="list-style-type: none"> Send fecal, crop and blood samples for several birds (can be combined) to a laboratory for diagnostic evaluation. One that I will be using in 2018 is www.vetdna.com 	<ul style="list-style-type: none"> We only want to treat the birds with antibiotics when there is a problem. Critical to this approach is getting a correct diagnosis.
7.17 (Tip)	Training Tosses	Toss the top three to five birds together.	<ul style="list-style-type: none"> Always toss the top three to five birds together ten minutes after the rest of the team has been released. This can begin as soon as the top birds are identified (i.e. during training) and does not have to wait until the races start. 	Birds will learn to fly together as a group. By getting the better ones on your team to fly as a unit they will tend to outperform the others as they benefit from their collective sense of where they are and their keen sense to get home. By teaching the best five to fly together it tends to prevent the better ones from establishing a regular flying group with the average or lesser ones.

ID	When	What	How	Why
8.0 Evaluation				
8.1	After every training toss and race	Record results - band, time and place for the 1 st 20 percent to loft whenever possible	<ul style="list-style-type: none"> • Record at least date, distance, time, place, speed and number of birds in the toss/race coming to the loft. 	<ul style="list-style-type: none"> • We are looking for birds that don't make many mistakes and consistently come home in the top percentage.
8.2	After the season is finished	Quantitatively evaluate each bird's performance for the season	<ul style="list-style-type: none"> • There are many ways this can be done. The best way is to record the number of races flown, total miles flown, number of times in top 20% to the loft, average UPR when in top 20% to the loft and Average Time To Win when in the top 20% to the loft. • While not as accurate, there are other simpler ways to evaluate the birds. Here is one: <ul style="list-style-type: none"> • 3 points if in the top 5% (to the loft) • 2 points if in the top 10% (to the loft) • 1 point if in the top 20% (to the loft) 	<ul style="list-style-type: none"> • Race (or test) results to the same loft are the most accurate genetic measure of racing performance.
9.0 Water				
Concept: Birds are given access to clean water (free of contamination and bacterial growth) at all times. It should be changed every morning.				
9.1	Every Morning	Change the water		<ul style="list-style-type: none"> • The bacterial count of the water should be very low. If it is changed every morning, reproducing contaminate bacteria do not have sufficient time to build up to appreciable levels. • Morning is better than evening since the birds are asleep over night.
9.2	Every Morning	Make the water acidic	<ul style="list-style-type: none"> • Use a pH strip from a Pool Supply Company to calibrate the amount of Apple Cider Vinegar to add to the water. A ph of less than 7 means the water is acidic. In my case it is 1 Tablespoon of ACV to a gallon of water reduces the pH of my water supply (a well) to 6. It can be less, but I 	<ul style="list-style-type: none"> • Canker is caused by the organism Trichomonas which does not thrive in an acidic environment. By providing only acidic water, the incidcnce of canker can be greatly reduced without the use of medications. What little is present should be able to be fought off

ID	When	What	How	Why
			prefer it to be no more than 6.	by the immune system of the birds.
9.3	Every Morning	Add probiotic	<ul style="list-style-type: none"> This is achieved in our program by the use of Comed products, notably Roni and Cometose. 	<ul style="list-style-type: none"> There are other probiotics that also work well. (Primalac from Star Labs is a good one).
10.0 Feed Rations				
Concept: Feed compositions are difficult to evaluate. There is much variation in both the literature and in the actual feedstuffs. These are what we use, though please take them only as a guide.				
10.2	Basic Grain	Winners Cup Select 12% (popcorn)	12% Protein with popcorn	<ul style="list-style-type: none"> Any high quality pigeon grain mix will work but we want a lower % protein in the final mix and so try not to use a 16% protein ix as the base grain.
10.3	Race Mix	Basic Grain White Milo (Caffer) Safflower Hemp Paddy Rice Corn	30% (6 parts) 15% (3 parts) 15% (3 parts) 10% (2 parts) 10% (2 parts) 20% (4 parts)	11.7% Protein 9.9% Fat 53.1% Carbohydrates
10.5	Depuritive	White Milo (Caffer) Safflower Hemp Paddy Rice Peanuts	25% (5 parts) 25% (5 parts) 15% (3 parts) 15% (3 parts) 20% (4 parts)	15.6% Protein 22.4% Fat 36.6% Carbohydrates Gives birds returning from the race an easily digestible feed rich in restorative elements.

Resources:

Feed Composition Tables:

Grain	% Protein	% Fat	% Carbohydrates
Basic Grain (I use Winners Cup Select 12% protein with popcorn)	12	3.0	60 (a guess)

ID	When	What	How	Why
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Barley (Malt)	10.3	1.9	66.5
Whole Corn	8.9	4.0	69.8
White Milo (Caffer)	9.8	3.8	68.7
Safflower	14.3	27.8	17.5
Hemp	19.5	32.1	18.0
Paddy Rice	7.1	2.1	64.1
Peanuts	28.0	47.0	13.4

ID	When	What	How	Why
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Summary of Race Feeding and Water

1 kg feed = 2.2 pounds; 1 liter = 1 quart

T= Tablespoon t= Teaspoon 1 T= 3 t

For most powders 1t = 5 grams

Day	Objective	Individually Applied	Feed	Water
Every Day	Balanced diet and gut		Winmix: 5 g / kg Curol: 15 ml / kg	Roni: 10 g / 2 liters ACV: 1/2 T / 2 liters Except on Friday (Shipping)
Saturday (On return from race)	Recovery		Dupruiative Mix Enercom(30 grams per kg)	Belgasol: 30 ml / liter as 1st drink, then • Hydracom Recup Amino (30 grams per 2 liters) • Hydracom Recup Gluco (20 grams per 2 liters)
Sunday	Cleansing		100% Barley • Enercom (30 grams per kg feed) • * Cometose (15 grams per kg feed) • * Load Pul (10 grams per kg feed for each 125 miles flown – 40 grams maximum) • * Acibloc (5 grams per kg feed) *if temperature of race is greater than 77 °F.	• Compound (40 drops per 2 liters)
Monday	Begin Build Up		50% Barley 50% Race Mix • 1 ounce per bird (35% AM and 65% PM) fed on return from loft flying. • Enercom (30 grams per kg feed) • Load Pul (10 grams per kg feed for each 125 miles flown – 40 grams maximum)	• * Hydracom Recup Amino (30 grams per 2 liters) • * Hydracom Recup Gluco (20 grams per 2 liters) *if temperature of race is greater than 77 °F.
Tuesday			25% Barley 75% Race Mix • 1.3 ounces per bird (35% AM and 65% PM) fed on return from loft flying. • A good oil (I currently use Flax Seed Oil, but Comed Fine Oil is very good) is used to moisten the feed so	

ID	When	What	How	Why
				<ul style="list-style-type: none"> the Spirulina powder will stick to the grain. • Spirulina is given at the rate of 1 teaspoon per kg feed. • Top dress the grit with teaspoon of minerals (I use Natural's Vitamineral powder)
Wednesday			100% Race Mix	<ul style="list-style-type: none"> • 1.3 ounces per bird (35% AM and 65% PM) fed on return from loft flying. • A good oil (I currently use Flax Seed Oil, but Comed Fine Oil is very good) is used to moisten the feed so the Spirulina powder will stick to the grain. • Spirulina is given at the rate of 1 teaspoon per kg feed.
Thursday			100% Race Mix	<ul style="list-style-type: none"> • Morning Feeding at the rate of .35 ounces per bird. • Evening Feeding – all they want and remove the feed once they roost for the evening. • * Cometose (15 grams per kg feed) *if temperature of race is greater than 77 °F. <ul style="list-style-type: none"> • Stamox (1 teaspoon per liter) • * Hydracom Iso (60 grams per 2 liters) *if temperature of race is greater than 77 °F.
Friday (shipping)		<ul style="list-style-type: none"> • Belgasol Drench 2/3 oz • Herbot Yellow Drops-eye/nose 	100% Race Mix	<ul style="list-style-type: none"> • Birds are given all the food they want but the food is removed 10 minutes after they finish eating. • To keep them from picking out just their favorite grains, it should be feed in smaller amounts and replenished when it is cleaned up. • Feeding is done at the following time: <ul style="list-style-type: none"> • up to 100 mile race – 10AM • 100 - 200 mile race – 11AM • 200 - 300 mile race – 12Noon • 300 – 400 mile race - 1PM • 400-600 mile race – 4 hours before basketing • * Cometose *if temperature of race is greater than 77 °F. <ul style="list-style-type: none"> • Compound (40 drops per 2 liters) • Hydrcom Iso (60 grams per 2 liters) • Each bird is given 3/4 ounce of Belgasol (30 ml per liter) at basketing

ID	When	What	How	Why
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Summary of Race Feed and Water Supplements Used

Comed*

- Winmix
- Curol
- Roni
- Cometose
- Enercom
- Hydracom Recup Amino
- Hydracom Recup Gluco
- Cometose
- Load Pul
- Acibloc
- Compound
- Hydracom Iso
- Lysocur Eye Drops

Any Health Food Store

Spirulina (Powder form)

Any Grocery Store

Apple Cider Vinegar (AVC)

Star Labs (www.primalac.com)

PrimaLac

Herbots*

Sambucus

DeWeerd**

Belgasol

Stamox (Beet Powder)*

Natural

Vitamineral ***

Versele-Laga

All in One ***

Tollison Vermin U-200 **

* Can be obtained from www.siegelpigeons.com or www.mercasystems.com

** Can be obtained from www.mercasystems.com

*** Can be obtained from www.jedds.com