

736 WWG house notes, for sitters & guests

Welcome!

Don't hesitate to call or write us or select neighbors with questions / emergencies!

Phone numbers & e-mail at bottom of this doc

last updated 12/14

OK, it's not hardly your typical crash pad...
so please read *everything* at least once
--sorry it's so long--
and perhaps again sectionally as review is needed.
'Probably more than you want or need to know.

Thanks!

Lose the shoes, please

Particularly be careful of the stairs... it's soft wood, 'easily gouged by gravelly bits stuck in shoe soles.

The vestibule (aka "mud room") is generally the best place to do shoes as you can park your butt on the bench there. We don't even use the north side "back" door in the winter, much preferring the double-door vestibule system to keep the house warmer. Help yourself to the slaps in the basket to use as house shoes.

When it's damp out, tracking grit around is inevitable, so it's really imperative to shake out door mats and sweep the vestibule frequently. There's a shoe brush fastened to the flagstone outside the front door that helps considerably.

Kitchen waste composting

Nothing compostable is trashed. Gunk collected in the kitchen sink screens all goes in the compost can. Only biodegradables & very small particulates go down the sink drain.

The chickens often enjoy scraps of greens & stuff that we chop-up for them, as opposed to composting. But they don't need stuff that is already rotting.

When the compost flip-can fills (or if it's humming with fruit flies), we take it out to the composting out on the terrace. Dump it in the green tumbler, and then tumble the drum a few times to disperse the stuff more evenly. To get the tumbler going, you probably need to crank with one hand, and use your other hand to help it along the first time around... after a full revolution or so, it'll go easier and you can just crank away. If you don't help it with your other hand, the crank will likely break. I end by putting the receiving door to the top, and rocking the drum back and forth to either side a few times, which helps compost settle away from the door, ready to receive the next load. With each bucket full of compost, it's important to add a comparable volume of shredded material from the pile. That helps keep it all aerated and aerobic (less stinky). Partially finished material will drop out from the inner chamber into a 5 gal bucket, which can then be added to the first heap, nearest the tumbler. If you see obvious stuff dropping into the bucket that's not very far composted, just pick it out and add it back into the tumbler again.

Garden & orchard

During the heat of summer, the garden needs routine watering. Use your discretion with variables like rain & clouds, etc..

Best is to water in the later evening, so it can have all night to soak down to roots. Lacking that, early morning. We mostly use greywater that's been processed through the sand filters.

If you're in charge for more than 10 days or so, all the fruit trees down below the terrace garden beds need a gallon or two of water each... delivered by a pair of 5 gallon buckets, and just walked down the trail to each tree. There are ~6 trees total, plus a few other shrubby-things that all need water either by bucket or hose. 'Big pain in the ass... someday i hope to have a better distribution system.

When watering, be careful with the hose from either the cistern off the SE corner of the house, or the greywater barrel: They will *siphon* water if the end of the hose is left lower than the cistern or barrel. So when done, make sure the end comes back to it's respective source. Also be careful to turn the pump from the cistern back off, after using water from there... it's easy to forget when using a triggered-nozzle that shuts the flow off itself... in the meanwhile the pump just struggles on-n-on, wasting electricity.

Water

Beginnings

We don't have a well(!). Our water comes from what falls out of the sky and lands on the roof. If that's not enough, we would have to call a truck to deliver bulk water. Don't want to do that, as it's not sustainable. So ***always be conscientious with water use***, especially in times of drought.

Soap up a sponge to wash dishes, and pile them up for quick, efficient rinsing. Let 'em drip a bit before placing in the drying rack.

In the shower, wet down, soap up, and then rinse off without letting the water run in between.

A pressure tank energizes every so often with a noisy pump. It runs for maybe 45 seconds at a whack.

The water coming out of the tap or shower is filtered well enough to drink. But it's our habit to filter drinking water through the ceramic elements in the metal dispenser. It takes time to filter, so you might want to fill it before heading to bed. Don't fill the top part more than the bottom part can eventually contain. Add water to the upper part with a pitcher.

Endings

Everything but toilet water is recycled through the planters, as "greywater". Therefore nothing that goes down the drain can risk clogging the system up. And everything ***must absolutely be biodegradable***... no toxics. We grow *food* in the planters.

We have biodegradable soaps, shampoo, & conditioner. Please use 'em unless you have biodegradable favorites of your own. We labeled the different stuff in the shower. The soap is Dr. Bronner's baby soap, and safe to use even on uranus. All the soap stuff is pretty concentrated so use sparingly.

When washing dishes, make sure the screen-traps are in place to catch little bits & pieces. We use the larger red-rimmed strainer to rinse into, and the drain screens are more just "backup" for what misses and goes into the sink. You have to watch the fine strainer under the course strainer in the drain... it can clog up kinda quick if you're not careful. Rinse the drain strainers into the red strainer, and then the red strainer gets emptied into the compost bucket.

Showers & Tub

In the shower, hair collected on the metal screen goes in the compost pail next to the toilet.

There's a squeegee in the shower to swipe down the glass, walls & floor, thereby facilitating more rapid drying.

It's ***very important*** to leave the shower door open several inches after showering to ventilate, as it otherwise mildews very fast. We typically leave it all the way - wide open until it's mostly dry, but still leave it at least a few inches open at all times except when showering.

We hang towels over the rail upstairs, or out on the deck, as they dry much faster there, and thus last much longer between launderings.

The downstairs shower is nicer in the winter, being generally warmer ... maybe the upstairs is nicer in the summer, being cooler(?).

The shower curtain upstairs can be suspended away from the tub walls using the purple elastic strung from the plastic hooks at either end of the tub... 'helps it dry faster & avoid mildewing.

We really don't use the tub unless we're ***absolutely certain*** there's no danger of eventually / seasonally running out of water. And then, maybe it's a good idea to save the tub water and scoop it out for watering house plants or flushing toilets (even though it would otherwise be recycled as greywater). If using the tub, it's nice to share with a friend, and save more water by filling less-full. Your tubbing now may be our lament down the line. Please respect.

Planters & Greywater

As a general rule, it's desirable to have plenty of greywater (recycled!) to do garden watering with. If here by yourself, using more water (as opposed to less) is perhaps fine, unless we're really in a drought situation.

A pump periodically kicks greywater water out to either the planters or the garden barrel (depending on valve settings) when maybe ~4 gal has collected in an "ejector pit" below the door in the mechanical room.

A valve indoors (at the east end of the planter) controls whether greywater goes all in, all out, or some of both. Arrows pointing either north or south do both in&out, west is all-in, and east is all-out. The valve turns (*with substantial effort!*) after squeezing finger toggles up... click back into 1 of the 4 positions. Without much vegetation indoors, we mostly send the water out. It's probably best to send greywater all-in or all-out as opposed to both.

The valve outdoors ***only has two viable positions***. With the black-ink 'L' west and north, it's sending water to the sand filters. With the 'L' west and south, it's sending water to the outdoor planter. Any other position is like "off", and ***absolutely must be avoided***, as this would mean the greywater pump couldn't send water anywhere... the pump might run endlessly, and greywater would eventually over-fill & spill onto the mechanical room floor.

'Guessing that in the summer, it's best to send most water to the garden barrel (which just over-flows after it's full), then less to the outdoor planter, then the least to the indoor planter. That's during the summer. Winters?... 'not sure what's best yet... perhaps someday re-introducing sand-filtered water to the collection cistern for even greater conservation (if it seems clean enough).

Once in a while, when directed indoors, the greywater might have a less-than-pleasant odor, but that seems rare, and associated with too-infrequent ejections &/or lots of oily stuff going down the kitchen drain (think "peanut sauce").

Cisterns

It's probably too much to write about how to pump water from the middle cistern to the upper cistern. Or even from the lower to the middle.

Plants & Flora

Indoor potted plants need occasional (~weekly or more) hand watering.

Eat fruit and vegetable matter as it comes ripe/ready.

Pets & Fauna

Don't let strangers crap in the planter (hey, it's happened more than once, as has dogs lifting a leg on the log post between dinning and living areas, or out back)!

We like pets. We also like most all of the wildlife, from large to small, and mostly they don't freely mix with their domesticated brothers and sisters. Consider keeping your pets (or those of guests) indoors &/or leashed if it has normal, healthy instincts. In particular birds and lizards abound and would perhaps be easy prey to a domestic cat, so please keep a keen-hunting feline indoors.

A favorite neighbor, "Rocky", a free-ranging, exceedingly savvy canine, got munched by a mountain lion in June of '06, and we frequently hear the big cat's yowling (a cougar can sound like a woman screaming bloody murder, while a bobcat is more of a yow). Rest in peace, Rocky.

Bears & foxes have their own peculiar instincts of their own, so beware.

Skunks & kangaroo rats have sometimes gotten into the compost piles. Maybe that's OK. They set off a stink when they get their tails zapped by the electric fence. If stuff is well composted in the green tumbler first, they don't seem to get after it in the heap so much. A bear upset the green tumbler once (Summer '09). (We're going to have to monitor this if it becomes problematic... maybe rig electric fencing around it or something).

Oh-yeah... beware the electric fence. It plugs-in to / turns on-off at an outlet on the north side of the garage. Don't forget to turn it back on if there's ever a need to turn it off. Inspecting it for breaks or "shorts" to grass from time to time is a good idea, especially during the growing season.

Fowl

The chickens & ducks have need to be cooped up at night, and probably kept in their run during the day if nobody's going to be around for more than an hour or two ... though in reality, even if you're around, they could get nailed in a mere heartbeat if a predator decides their hungry & ready.

Food, shaken in their bowl will likely get the chickens to follow you to the coop / run ... put it in there, and give 'em space, and usually all of 'em will jump on in on their own if their hungry enough. If they're not hungry ... the hens are nearly impossible to catch, especially if they don't know you.

If cooped-up during the day, make sure they have plenty of food & water.

Check for eggs in the nesting boxes a few times a day. They mostly do that business in the mornings, but ... 'never know. Fresh eggs should be dry-wiped of obvious debris, but don't wash with water unless they're really gross.

The birds sometimes make a lot of noise before, during, or after laying. Or maybe if there's a hawk in the nearby. 'Good idea to check and see what the fuss is about, if you're around and hear it... If they're all going off, it could represent real trouble.

The ducks get clean pool water maybe once every few days. We use hoses to siphon old, dirty water off to the garden or trees. Cistern water is used to refill it about 1/2 or 2/3rds full... they always splash it all out anyway, so no sense filling it to the brim. They love it, and go crazy their first few times when it's fresh. 'Often a hump-fest early in the day too... 'amusing.

Toilets & humanure composter (aka the "Turd Twirler")

We have a composting toilet, with low / continuous flush toilet stools up & down.

Composting depends on bacteria and oxygen to be done right. Nothing goes down the toilet that might kill the bacteria. Don't pee or poop indoors if you're doing antibiotics (really)!

All pee-TP and nose-wipe can go in the compost can next to the toilet. Shit-TP can be flushed down the toilet. By minimizing TP going down the hole -- especially when just peeing (ladies!)-- the toilets are *far* less prone to clogging.

We don't practice "If it's yellow, let it mellow", as there's no need. For just pee, a quick flush is all ya need. For a big load of shit, we always fill the bowl a ways first, to help insure that it gets a good ride when flushed.

Shitting with these low-flush stools often creates a mess, so there's a toilet brush and a spritzer bottle of enzyme solution to help clean-up. The enzymes are good for the composter, BTW, and just a few pumps per use is good. Please use both the brush & enzymes regularly. Please rinse & shake the brush off well within the bowl before replacing in it's holster. Shaking vigorously in the bowl is more effective & quieter than whacking on the rim.

If when flushing it "burps" a bubble and/or produces a bad odor, that means it's clogging in the pipes. They're somewhat prone to clogging since so little water is generally used per flush. We *strongly* prefer to do all of our shitting downstairs since there's less plumbing between there & the composter to clog.

If they do clog, the plumber's helper is in order. Fill the bowl a ways, push the plunger down to seal, step on the flush lever while you vigorously work the plunger, and then listen as you remove it and continue flushing a bit... you can kinda hear when the line is clear all the way to the composter. 'May have to repeat once or twice. The key is getting a good seal between plunger & porcelain while working it.

'Ask that gentlemen please take a seat when peeing, as it goes a long way towards keeping the area in the vicinity of the stools clean. Please don't construe this as some sort of an affront to your male-ness... it's not. Or better yet, go outside and water a compost pile... seriously, the moisture is good for the piles, and it's less moisture into the house toilet-composter, which is good too.

Don't put kitchen compost down the toilets ... it's handled elsewhere... 'far better to compost the two waste streams separately.

Don't worry about the humanure composter if you're only here a *few* days... but if here for say a week or more, the drum does need to get tumbled. Ordinarily, it's tumbled every 2 or 3 days. 'Should definitely be showing you how to do it beforehand.

There's a light just to the left of the hatch into the basement. The one dim lamp in the "dog house" (finished-compost receptacle) is on all the time.

In addition to turning the "bio-drum", it also likes to be fed wood shavings to help keep things aerobic. One turn (***clockwise when looking at it from the north***) of the crank turns the drum 1/7th of a revolution and to the place where the drum can receive a couple scoops of wood shavings (in a bag or bucket) through the upper swing-door towards the left end of the unit.

After adding wood shavings through the door, close the door and crank earnestly. Be cautious with the handle for a few revolutions until the drum's load redistributes and tumbles more easily. Then you want to turn the drum several revolutions, **listening** for the click every 7th revolution of the crank that

indicates a full revolution of the drum. 10+ drum revolutions are in order (thus 70+ crank revolutions). 70 cranks is a lot, so perhaps use both hands, and/or take breaks.

It is **ABSOLUTELY IMPERATIVE** that the drum ends up centered with it's receiving port under the inlet pipe on top. It's only centered upon hearing the click when tumbling. **Read that again.** Clicks occur every 7th revolution with the crank arm down at the ~6-o'clock position. If the drum is not centered to receive it, shit doesn't go into the drum, and instead creates a heinous mess on the outside of the drum for which we will forever curse you.

It gets pretty stinky too, during all of the tumbling. The fan you hear runs 24x7. It exhausts the odor out of the mechanical room, but we keep the hatch-door closed when we're not in there, all the same. The fan also brings air into the composter, evaporating excess moisture. It's a good idea to run the whole-house ventilator fan for say an hour after tumbling the compositor, to keep the house air fresh.

Excess moisture that can't be evaporated drains out the left end of the composter's base into a separate "ejector pit" behind it. When enough collects there, a pump kicks and sends that blackwater out to the leach field. It's very rare that you ever hear that pump go off unless there are a lot of people flushing the toilets.

Little flies tend to breed in the composter. It's a bummer. There's a 1W bulb in the "doghouse" (compost receiving box on far right) left on all the time, to attract and keep the flies in there for their entire life-cycle. When tumbling, keep the lights in the upper part of the mechanical room off and the hatch-door closed as much as possible so that they're mostly drawn to the single light in the doghouse instead.

Solar heat

Collection

Not long after sun starts hitting the solar panels up on the roof a pump kicks to start circulating water up to them. It gurgles quite a lot, especially at first. 'Also boils if-when the panels get hot enough. That system does fine on auto-pilot. It turns off after the storage tank (behind the composter) reaches it's high-temp set point, or after the sun is far off to the side or goes behind clouds. It may come on and go off several times a day. The Solar heats water for domestic use as well as space heat in the floors.

Distribution

Our hot water is very hot. Don't scald your hands in the kitchen sink. The showers have a dial-able thermostat in the center of the control that's very effective & nice.

Space heat is all in the floors and very slow to react. If you turn a zone thermostat up, it might be ~1 hr before you feel anything in the slab downstairs. More like 6 hours upstairs through the carpet. Thus, ... it's kinda stupid. 'Best to leave them set to something reasonable (~20 C is 68 F), and forget about 'em. There's a zone thermostat in the office, one in the main living area at the foot of the stairs, one in each bath, and one in each bedroom. We dial the bedroom(s) we're not using down to ~15 C in the Winter. 'Mostly just turn thermostats "off" in the summer.

Retention

In the winter, in order to keep the heat in, be sure to close blinds at night. Or if the sun's not going to be shining during the day, just leave 'em closed. Conversely, in the summer, the blinds can help it stay much cooler. Use your discretion. Besides the blinds, we also have reflective bubble-wrap stuff for some of the windows... 'works great, and really helps retain heat.

Omission

In the heat of summer, the house stays coolest, if you keep doors and windows mostly closed during the day, and just open/crack them as needed at night. Use screened windows to keep bugs out when lights are on at night or when bugs/moths are otherwise bad.

Solar electric tunes

Two car stereos provide tunes outdoors, and run off the two 12 V PV panels out on the deck, and batteries. The button just above center to the far left turns 'em on, and also cycles through Tuner - CD - Aux. Aux is fed from speaker channel-B from the indoor stereo system (**which is crapped-out at the moment**), but don't turn it up too much or the car stereo's distort. Be respectful of neighbors with the outdoor tunes. Press & hold until "Good-Bye" to turn off.

Solar electric AC power

'Pretty much auto-pilot. It's a grid-tied system with (a small bit of) battery backup. If the grid should fail for more than just a few minutes, it'd be a good idea to turn off everything that's not really crucial. But how do you know the grid's even down??... not sure... notice that other lights in the canyon are all out(?).

If the power does go out, there are some flashlights in the wicker bin in the inside vestibule, as well as some candles in the 2nd drawer down in the kitchen.

AV gear & Internet

'Pretty typical... won't detail too much here.

The DVD plays through the TV's "VIDEO 1" input source. We have basic cable TV, couch potatoes that we generally aren't.

We have cable internet. There's an available wired port at the east end of the kitchen counter. Then there's wireless 802.11b/g via an Apple Airport up on the shelf of the west wall of the mechanical room. The private network name is "khaosSansWires" and the PW is "khaosW/OWires". Do DHCP with either. The WiFi is set to medium-power, and may only just work up on deck, or out back in the shade. There's WiFi out at the Shedroom too, though you may need to turn your WiFi off & back on again to connect properly (don't know when/why etc.).

There are also cabled ethernet ports at the kitchen counter, and up in the loft, as well as the office & both bedrooms.

Wood stove

If the sun hasn't shown for a couple days, and it's real cold out, we might light a fire in the stove.

Near the base of the stairs on the wall next to the thermostat is a dial switch for pushing air across the back of the stove from that vent in the wall behind it. It pulls warm air down from up in the loft, thus getting a good circulation through the house. Without the blower, it would get excessively hot near and behind the stove, so **do** use this. Throttling it fairly low is fine, but it needs to be on while the stove is cranking. And it *will* crank if stoked-up.

Behind the stove on the floor is a black plastic cap covering a combustion air inlet. Pull that off when trying to get a fire going. Lots of paper and kindling are in order to make sure it goes good.

The stove door handle detaches so it doesn't get hot. Light with the stove door cracked until it's really going with large pieces of wood. It takes at least 5 minutes of a good fire to really get going well. Then seal door shut and remove the handle.

There's a poker & glove in the copper bin with the kindling and starter paper. If we need it, we stack wood behind and to the east of the stove, keeping access to the combustion inlet available, and not blocking the blower.

I cap the combustion air before I forget to again, days later, otherwise it's just letting cold air into the house.

The lever under the right front of the stove controls combustion rate... down is full-open, while up/west tends to choke the fire to death.

We compost all the ash from the stove out in the green tumbling composter. The ash drawer is under the stove grate. Of course there can't be any live coals left in the ash if it's bound for the tumbler.

Cookstove

Sometimes, the stove burners won't light-up if the oven is also in use. Either just wait a bit, or turn the oven off to first get a burner going.

If you boil something over, please clean it up *promptly & thoroughly* so that gunk doesn't get scorched-on hard. A modest flame goes a long way towards avoiding boil-overs & saving fossil energy. Don't put a small pot on a large burner, and then crank the flame way up... that's just wasting fossil fuel.

Ventilation

In the warm months, it's easy, just crack windows at night, and close 'em by day.

In the depth of Winter we have a "Heat Recovery Ventilator" ... the white box suspended from the ceiling in the mechanical room. The ventilator takes cold fresh air in, and stale warm air out, but puts them through a baffle to exchange and save the heat, and is thus better than opening windows when it's cold out. It's turned on with the timer switches in either bathroom. There's also a low / high switch dangling from a cord just inside the mechanical room door. You can hear the difference between high & low easily enough.

Likewise, we always use the front vestibule entry when it's cold out. Pull the doors shut tight behind you when coming or going... they pull/push hard against the air-tightness of the small room.

Trash & recycling

We really barely create much trash. If it's not compostable or recyclable, it's a real drag, and we'd rather not have it. We might take one garbage bag of trash to be hauled (from down by the mailbox) once every ~4 months (pickup on wednesday mornings, barring holiday schedules). Seriously. Do your part. There's a plastic garbage can in the garage with an orange liner bags. That's where we collect what little we do, and we pack it full and tape it shut when the time comes.

We have recycling containers in the mechanical room for "commingled", office paper, paper board, and also collect newsprint, cardboard, and scrap metals separately. There's an EcoCycle guide posted on the wall near the washer. Most plastic bags can be recycled, but a lot of other plastics can't... but nevertheless, we're saving those other plastics (a petroleum product) for the day when they can be recycled (maybe). If you don't know which bin something goes in, you can just leave it for us to sort out later.

Laundry

The Equator is a great washer, but a crappy dryer (and all dryers are a waste of energy, especially in CO). We exclusively line dry things.

A full load (full, but not crammed / packed) does well with just a bit of the powdered biodegradable detergent on the shelf near the machine. There's also an ionizing laundry disk that we toss in (it's that 3" disk / blue-green thing).

Before starting a load, plug in the auxiliary fan, labeled to the right of the machine. That keeps a circuit board from overheating. Unplug when done.

You close the door, add detergent in **middle** compartment at upper left (just a single or 1/2 scoop is plenty), make **all** the settings, and hit the power button. We do "Cottons - 3" for most everything. Once started, there's no stopping it until it's finished (~60 minutes or so). **No bleach** or other toxics (greywater!)

After a load, leave the machine door open so it doesn't mildew inside the drum.

For bad stains or things that just have to be white, we have some powdered "OxyClean" spoo that we do a partial scoop of in a bucket of smoking hot water, and let things soak overnight, and then pour it out on the stone patio outside in front of the dinning room slider. It's very effective.

We line dry everything out on a retracto-line that's on one of the trees near the 2nd sharp bend as you start down the trail. Only a very small & loose load has a chance of drying in the dryer, and it takes a long while, plus eats electricity (duh!). The sun does the same job faster and for free. Have a very specific way to lay-out the line, otherwise it's prone to getting pine sap on it, which in turn then gets on your clothes.

Food & ~libations

Please do what you can to not let perishables perish, and compost what does.

If we didn't hide it sufficiently, it must be fair game, excepting maybe some of our wine ... some may be pretty special &/ or need to age.

Roof access

If you need/want to get up on the roof, out through the window in the loft is easy. Karl gets up there to broom/shovel snow off solar panels in winter, but would **NOT** advise that anyone else attempt it, because it's extremely slippery and thus treacherous. Die at your own risk. But if you do, leave snow on the roof so it can melt and contribute to the domestic water supply, don't shovel it off on the ground.

Driveway

It's a shared thing with the neighbors. Please be respectful if driving. Don't spin wheels and adversely contribute to washboarding. Don't speed... go slow (up & especially down). Don't attempt when snowy if there's **any** chance you won't make it... instead, park behind the mailbox, use the foot path, lead a less stressful & more peaceful existence.

Tools

'Mostly keep tools in the garage. "Yard" implements are in the bird coop vestibule.

Contact Info, emergency or otherwise

Phone

Karl's cell 303-443-6602

Neighbors:

Scott Smith (handy guy, across from...)	303-304-1413 c
Heron & Mary	720-379-4508 h
Marco & Kathy (immediately to west)	720-362-3830 h
	303-746-0591 c Marco, 720-840-8489 c Kathy

Family:

Karl's Sister (WA)	206-352-2300 h/o
	206-617-9550 c

E-mail

Karl <karl@khaos.com>