

JIVE/ASTRON Softball Users' Guide

Bob Campbell (NFRA, JIVE): text aug98 / color figs jul01

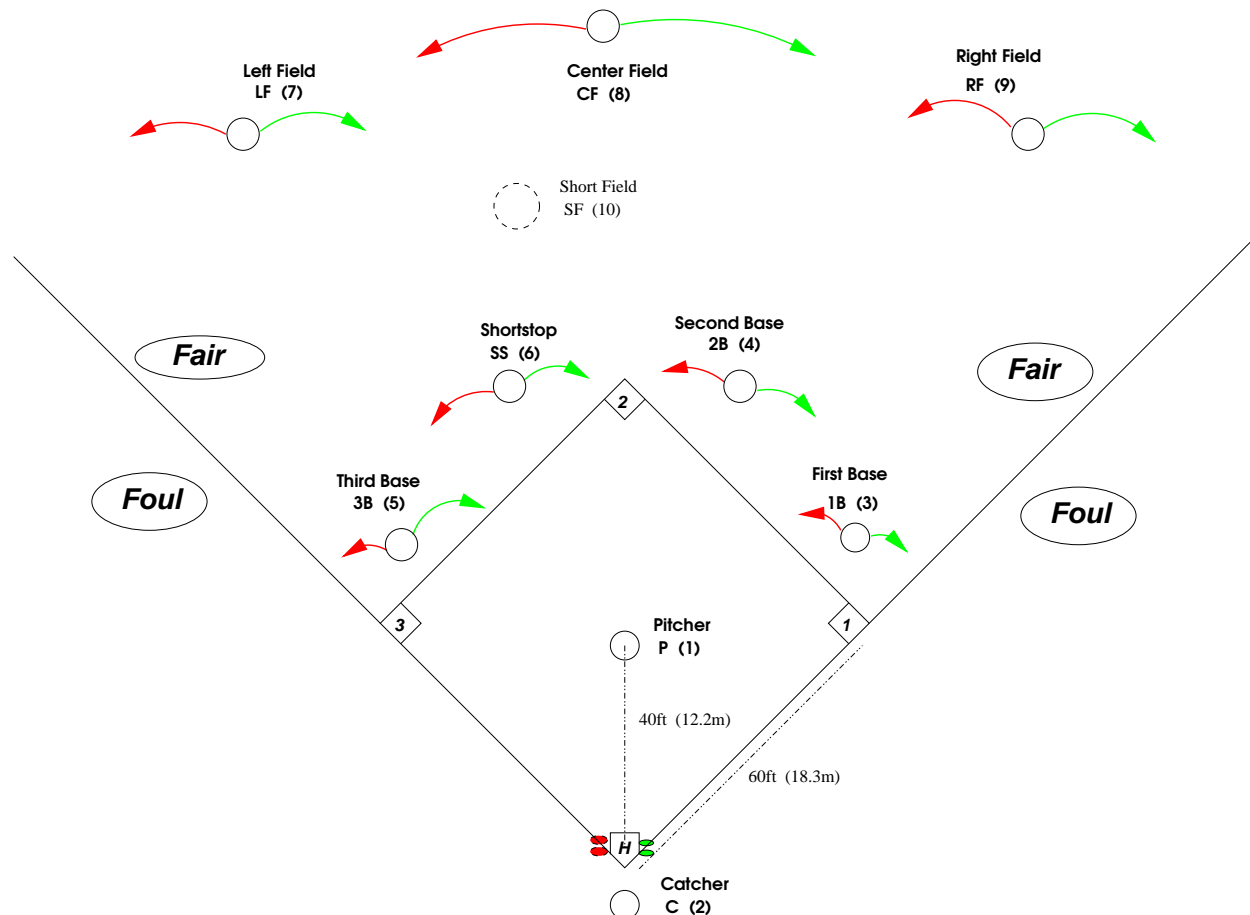
additional material on outfield play: Bryan Henderson (U.Washington) aug03

1. Terms & Default Configuration

Terms are placed in an *italic* font when first used.

The figure below shows a typical *ball diamond*. Dimensions for softball have been added with the dotted-dashed line segments (for baseball, multiply by 1.5).

- The *bases* are labelled with an italic font, or with *H* for *home plate*. §3 discusses base-running.
- *Fair territory* is the area between the perpendicular *foul lines* radiating from home plate; *foul territory* is the area outside them, as noted by the large, ellipsed italic font. §2 (on batting) discusses the rules pertaining to *fair-* and *foul-balls*.
- The circles show generic (*straight-away*) positions for baseball fielders, labelled by the position name, its abbreviation, and number. I've tried to stick to the convention that "1B" means first base itself and "the 1B" means the first-baseman. The position number is used for relating the path of the ball during a defensive play: 5-4 means the 3B fields the ball and then throws it to the 2B. We'll use this in §4, which discusses fielding, and also explains the red & green arrows (*shifts*) drawn for some of the fielders. A softball team has an additional player: the short fielder, who is something of a rover, here shown with the dotted circle. We'll save him/her for the end of §4.
- The *infield (IF)* comprises the 1B, 2B, SS, 3B, and P, plus the territory they typically patrol. The *outfield (OF)* is the territory and players farther from home plate. (but an infielder can always go back and make a play in the outfield, and *vice versa*.)



2. Batting

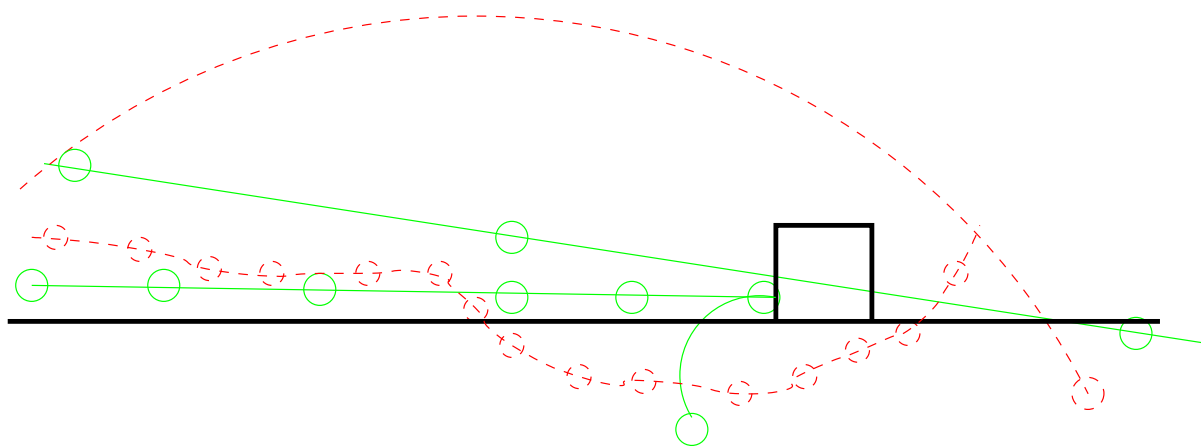
Fair/Foul: So you've just hit the *pitch*. Most times it will be pretty obvious whether you've hit a fair ball or a foul ball, but sometimes when your hit is *going down the line* you can't make an immediate determination. For these close situations, there are 3 cases (these apply equally to both foul lines, so "the base" can refer to either 1B or 3B as appropriate):

- (a) Ball hits the ground before passing the base untouched by a fielder.
- (b) Ball hits the ground beyond the base untouched by a fielder.
- (c) Ball touched by a fielder or stops on its own before (a) or (b) apply.

For case (a), the ball is fair if it passes by the base in fair territory, or if it hits the base itself. Note that the entire base is considered fair, so passing over any part of the base means a fair ball. It doesn't matter what the ball did before getting to the base, or what it does after passing it.

For case (b), the ball is fair if it lands in fair territory behind the base. It doesn't matter where it was anywhere in its flight. Note that the spin of a batted ball that is going down the line will usually always make the ball tend to curve towards foul territory, so it is not unusual for a ball that starts fair down the line to land foul (the wind can also be a factor for high *fly balls*).

The figure below shows some example hits. The lines show the path of the balls over the ground, and the circles on the lines show where the balls have hit the ground. Fair balls have been drawn by solid green lines, and foul balls by dashed red lines.



For case (c), if the ball stops before reaching the base without being touched, it is fair or foul according to where it stopped. If a fielder touches the ball before it passes the base, or before it lands after passing the base, it is fair or foul according to where it was touched. Thus, in the infield, touching a ball about to go foul will make it fair (hence the phrase "*let it go foul*"). Similarly, you can't make a fair ball foul by slapping in into foul territory before it lands.

There are a couple "2nd-order" ways for a hit to be foul:

- striking home plate before anything else,
- touching the batter while she's still in the *batter's box*, or
- touching a base-runner who is standing in foul territory.

Safe or Out? So now you've hit a fair ball. As the batter, you must run to first base (running beyond 1B

is the topic for §3). Unfortunately, you may be *out*. (If you've hit a foul ball, there's no need to run to 1B; but because in close cases you can't tell immediately whether your hit will be fair or foul, you may want to run anyway. If it turns out to be foul, you just have to come back and bat some more.) Since we don't worry about *balls* and *strikes*, there are only 3 principal ways in which you as the batter can be out:

- (a) A fielder catches your hit (either fair or foul) before it hits the ground. In this case, it doesn't matter whether you've already reached 1B or not. A foul ball that goes directly back to the catcher and is caught is not an out (just a *foul-tip*) if the highest point of its arc is not higher than your head (or thereabouts).
- (b) A fielder holding the ball touches 1B with any part of his body, with the ball (that he is holding), or with his glove (that has the ball in it) before you do. Usually this occurs because your *ground ball* was fielded by an *infielder* and thrown to the first-baseman who was standing with her foot on the base.
- (c) A fielder touches (*tags*) you with the ball (that he is holding) or with his glove (that must have the ball in it) before you reach the base.

There is also a 2nd-order way of being out via the *infield-fly rule*, which we can discuss should the situation ever arise (it essentially prevents the fielding team from getting a cheap *double-play* on a *pop-up*, which will be more apparent after §3).

If you reach 1B without any of (a)–(c) happening, you are *safe* there, and become a base-runner. Normally, anytime you're not touching a base you can be *tagged out*, but because you'll be running really fast to get to 1B, it's okay to over-run it, as long as you turn off towards foul territory after *the bag* (jargon for "base").

3. Base-running

Relevant Rules

The key to base-running is understanding that there is a distinction between times when you are supposed to go somewhere and others when you may voluntarily go somewhere. This distinction depends on the *a priori* base-configuration (which base am I on?, are other bases also occupied?) and what happened with the batter's hit (was it caught before hitting the ground?). This distinction is important to base-runners (and to fielders) because it dictates the ways in which you may be put out. Let's call the base to which you're supposed to go, or on which you're supposed to stay, the "mandatory base" (not baseball jargon, just a phrase I now made up). In any situation, there will only ever be one mandatory base for each runner.

- At the mandatory base, you will be out if:
 - A fielder holding the ball touches the base with any part of her body, with the ball, or with the glove-holding-ball before you do.
 - A fielder tags you with the ball/glove-holding-ball while you are not touching the base.
- Anywhere else, you will be out only if:
 - A fielder tags you with the ball/glove-holding-ball while you are not touching a base.

The instant you safely touch your mandatory base, it loses its status and you no longer have any mandatory base. (Also note that once you have touched home plate safely, you have already scored and are no longer a base-runner.) As an example, let's look at the batter. After she hits the ball (and it isn't caught on the fly), her mandatory base is 1B; she can be retired in either of the two ways above. If she reaches 1B safely and decides to continue on, she must be tagged to be put out.

The (theoretically) easiest case for a base-runner is when the batter's hit is caught on the fly. After the catch, your mandatory base is the one you were on before the pitch, but you may voluntarily try to advance to some further base (again, **after** the catch — this is called *tagging up*). This means that if you started to run before the ball was caught, and the fielders get the ball back to your original base and touch it before you can go back and touch it, you'll be out — you don't need to be tagged. If you weren't touching the base when the ball was caught but still want to advance, you'll have to go back and touch it before advancing. Operationally, the tricky bit for the base-runner is knowing whether the ball will be caught or not. If, for example, a fielder drops a catch, your mandatory base could well change instantly, and through no fault of your own you may become *out by a mile* (more later).

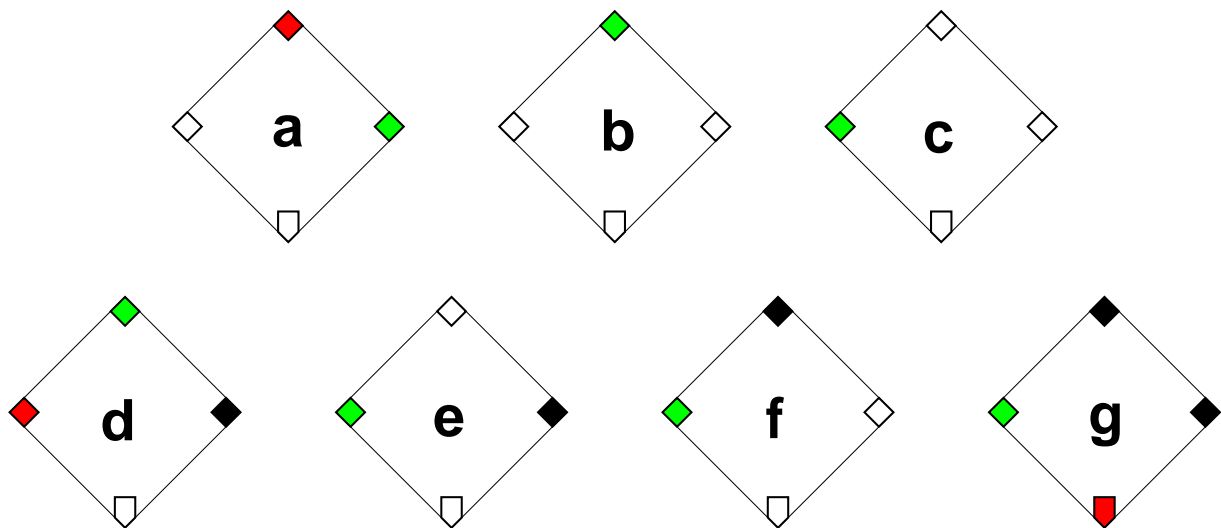
When the batter's hit lands in fair territory without being caught (either as a *ground ball* in/through the infield or a hit to the outfield that *drops in*) is a little more complicated. Now your mandatory base will depend on your current base and the occupation of bases behind you (occupation of bases ahead of you never affect your mandatory base):

- You're on first base: your mandatory base is 2B.
- You're on second base:
 - if there is also someone on first base, your mandatory base is 3B,
 - otherwise, you don't have a mandatory base.
- You're on third base:
 - if there are runners on both first and second base, your mandatory base is home,
 - otherwise, you don't have a mandatory base.

Put another way, on a ground ball, the batter's mandatory base is 1B. If someone is already there, he has to vacate it to make room for the batter, and his mandatory base becomes 2B. The same argument would apply if someone else were also already on 2B at the time; she has to vacate 2B for the runner coming from

1B, and her mandatory base would become 3B. So, on a ground ball, your mandatory base is the next one if someone else's mandatory base is your current one, with this causal chain being traced back ultimately to the batter.

When you have a mandatory base on a ground ball, the rules for being put out at your mandatory base are as above. This situation is called a *force play*; if a fielder holding the ball touches your mandatory base before you do, you're *forced out* (officially, the batter doesn't get statistical credit for a hit, even though he may well be standing safely at first). If you don't have a mandatory base, or try to advance beyond your mandatory base, you must be tagged out. The figures (a) – (g) below illustrate all possible configurations; you are green, occupied bases are black, and your mandatory base, if any, is red. To be repetitive, you can be forced out at the red base; at all others you need to be tagged out.



There are also some “2nd-order” ways of becoming out as a base-runner, which we can go over in more detail should they arise in actual play:

- *Over-running* a base: unlike 1B, you have to remain touching 2B or 3B to continue to be safe, regardless whether they are mandatory bases for you or not. Let's say 2B is your mandatory base. You touch it before the ball gets to the infielder *covering the bag*, so you're not forced out and it loses its mandatory status for you ... but your momentum carries you a little beyond it. Now the fielder can tag you and you'd be out; if he just stands on the base holding the ball while you get back, you'd be safe.
- Running \gtrsim 1 m out of the *base-path* for the purpose of avoiding a tag (*i.e.*, you can't run around aimlessly all day; you either have to go forward or back).
- Being hit by a batted ball while you're in fair territory, before any fielder has had the opportunity to touch it. (In this case, the ball is still *live*, and the batter is out/safe as the play subsequently develops, as though you were just part of the field.)
- 2 people on a single base at the same time (the runner for whom the base isn't mandatory, or the trailing runner if that doesn't apply, is the one who's out).
- Passing another runner on the base-paths (the passing runner is out — but you really have to be asleep to do this).
- Skipping a base (*i.e.*, missing 2B when going from 1B to 3B).
- Intentionally interfering with the fielders catching/throwing/*etc.* the ball. If you're running to a base, and the ball thrown by a fielder to the base hits you, you're not out. If you jump out of your way in order to block the ball on purpose or wave your arms like an idiot to distract the fielder covering the bag, you probably are. If you intentionally block a throw to another base (say, after you've already been

forced out at 2B, and the fielder has just thrown to 1B to try for the *double play*), the runner going to 1B could also be called out for interference.

Safety/Sportsmanship tips

When running around 2B and 3B (or 1B if you know that you won't be stopping there), especially on a damp field when you're not wearing cleats, it's safer to *round the base* by hitting the inside corner of it with your left foot (actually, it's also a bit faster too, since it forces you to take a more symmetrical path, minimizing your total path distance more reliably). If your pivot foot slips out from under you, you'll still fall down — but because your left leg is the inside one as you run counterclockwise, you'll have considerably less likelihood of spraining anything in the groin area.

Base-running safety also depends to a large extent on fielder positioning/play, but that's for §4.

In just-for-fun recreational play like ours, runners are typically allowed to leave their bases when the batter hits the ball. With the bases so close together, leaving with the pitch makes force plays all but impossible.

Sliding into any base other than 1B certainly lets you get in more quickly (since you don't have to slow up so much/soon to avoid over-running the base), but it also greatly increases the chance of injury when the fielders are not used to the runner coming in at their feet at the same time the ball is coming in from some different direction. If it's going to be that close, you probably should be out anyway for bad judgment in trying to make it. Sliding is commonly not allowed in many recreational leagues.

Special Situations

Tagging Up: Generally, when you're on base and batter hits the ball in the air that may be caught, you have some decisions to make. If you start running right away and it's caught, you'll have to run all the way back, perhaps faster, to avoid being out. If you stay on the base to be 100% cautious, you may not be able to advance as far as you could if the ball isn't caught. What you should do is go D_{thr} away from your base while the ball is in the air, where D_{thr} is the distance you can comfortably travel in the time it would take to throw the ball from where it's caught to your base. As the ball is hit farther, or to a part of the field away from your base (*i.e.*, LF if you're on 1B), D_{thr} can increase. And there are some no-win situations: you're on 1B and the batter pops-up between 1B and 2B. Barring a defensive catastrophe, either the batter or you will be out regardless of your base-running skill: the batter if it is caught, you if it is dropped (and you're forced at 2B). Accept it and don't *run into an out* by becoming greedy. (Note: this is where the infield-fly rule comes into play: with runners on at least 1B & 2B with less than 2 out, a pop-up to the infield could be turned into an easy double play at 3B & 2B if a fielder intentionally drops it. To avoid this, the batter is out once he hits an easy-to-catch pop-up, and thus the runners aren't obligated to advance if it's dropped. There's no such thing as an "infield *line-drive* rule" however.)

There's an exception to the D_{thr} rule if you're on 3B, and the ball is hit deep enough to the outfield that you know you can score comfortably whether the ball is caught (by tagging up) or not. In this case, just stay on the base, watch the ball, and start running when you see it touch the outfielder's glove.

When you do tag up and try to advance, you must be tagged out: once you touched your original base when/after the ball was caught, you longer have a mandatory base. The fielders have to tag you out at the base you're trying to reach, or even at the base you came from if you change your mind halfway and come back. Note also, that while you can't advance or be put out on a foul ground ball, a foul ball caught on the fly works just like any other ball caught on the fly: you can tag up and try to advance, or be thrown out at your old (mandatory) base if you strayed too far away. If a foul ball is dropped, it becomes just any other foul ball and you can't advance or be thrown out anywhere (it's sometimes in the fielder's best interest *not* to catch a foul ball, if preventing your advancement is more important than the out).

When to Run When Not Forced: Here we can consider two cases, you're on 2B (fig b) or on 3B (figs c,e, and f).

First, when you're on 2B, and the batter hits a:

- ground ball to the P — stay.
- ground ball *in front of* you (SS, 3B) — don't commit yourself to running to 3B until you've seen the throw to 1B leave the fielder's hand (otherwise the fielder could just hold the ball and tag you out on the way). You can be a little off the bag (the D_{thr} rule) before the throw, and if you don't think you can get to 3B before the ball can be thrown back from 1B, you don't have to try.
- ground ball *behind* you (2B, 1B) — go.
- ball to OF that might be caught — see “Tagging Up” ¶.
- ball to OF that clearly won't be caught — go to at least 3B. In an ideal world, your team would have sent someone to *coach* third, who would be looking at the play and could tell you whether to stop or continue. Otherwise, you'll have to use your own judgment: where was the ball hit, how quickly can the outfielder get to it, how long will the throw take, *etc.*
 - Usually you are more likely to try for home with 2 out (a rule of thumb: you don't want to make the 2nd out at home, because there are so many ways to score from 3B with 1 out).
 - Likewise, if you're trying to go from 1B to 3B on a hit, you don't want to make the 3rd out at 3B; the advantage of being at 3B instead of 2B with 2 outs isn't that great.

Second, when you're on 3B, and the batter hits a:

- ground ball to P — stay.
- ground ball to 1B — stay, maybe *dance* down the line a little ways (the D_{thr} rule); but the first-baseman can see what you're doing the whole time.
- ground ball to 3B — stay on the bag until you've seen the throw to 1B or 2B leave the third-baseman's hand. Even then, going can be risky if the other infielders are alert.
- ground ball to 2B or SS — go, unless they're playing in quite a bit (it's a pretty long throw from their usual positions).
- ball to OF that might be caught — see “Tagging Up” ¶.
- ball to OF that clearly won't be caught — go.

When 2 Are Out: When there are two out, the worries about whether or not a hit will be caught on the fly become moot: if it is, there are 3 outs anyway and it doesn't matter whether you're on your mandatory base or not. Hence, you hear, “2 outs — run on anything.” (However, you have to stay somewhat awake; you yourself could still make the third out by trying to run a base too far.)

Interesting complications also arise if a run scores as the third out is being recorded. If the third out is a force-out at any base, the run does not count. If the third out is not a force-out, then the run counts if the runner crossed home before the tag was actually applied to the other runner for the third out (relativistic questions of simultaneity almost never arise, but I would assume all events should be expressed in a coordinate time defined by the proper time of a point comoving with the *pitching rubber*, since it's fairly central). As examples:

- You're on 3B with 2 out, and the batter hits a ground ball. If he is thrown out at first, your run doesn't count regardless of how quickly you got home.
- You're on 2B with 2 out, and the batter hits a ground ball through the infield (so that you could score without being out yourself), but instead of stopping at first tries to reach 2B. If he is tagged out before

you cross home, your run doesn't count; if the tag comes after you cross home, it does. (Hint to the batter: don't be stupid — stay at first if it will be that close.)

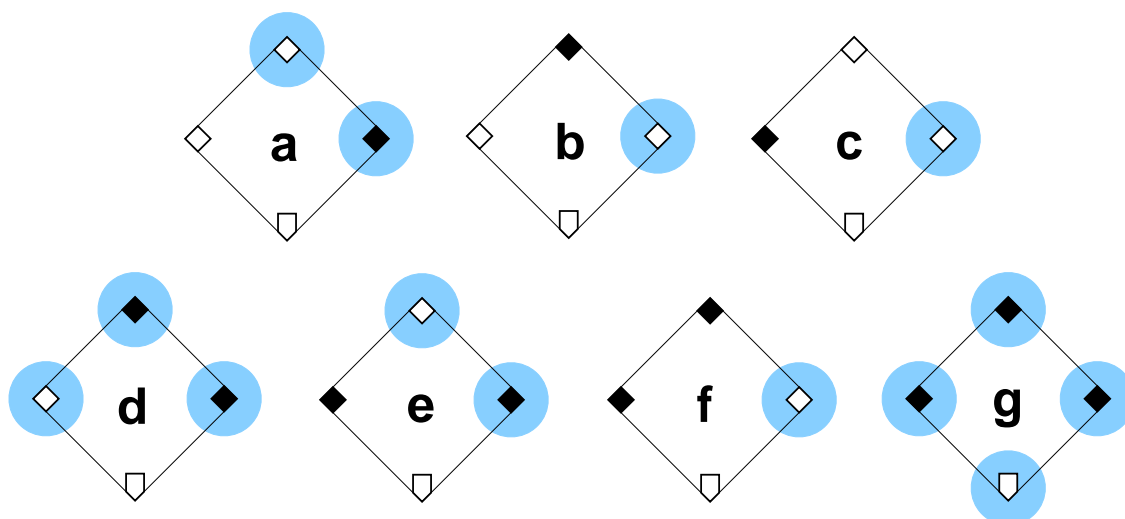
- You're on 3B and someone else is on 2B with 2 out, and the batter hits a ground ball to the second-baseman. If he throws to first in time to get the batter, your run won't count. If (for whatever reason), he throws to third and the runner at 2B (who wasn't forced) runs very slowly to third and thus isn't tagged out until after you've crossed home, your run does count. (Hint to second-baseman: don't be stupid — throw to 1B or get the force out.)
- You're on 3B and someone else is on 1B with 2 out, and the batter hits the same ground ball. With two outs, your run won't count if an out is made at either 2B or 1B.
- Now the extra-credit: Same situation as above, same ground ball, but now with only 1 out. If the defense makes a typical double-play by getting the force-out at 2B and then *retiring* the batter at 1B, your run won't count. However, if they (for whatever reason) put the batter out at 1B first, the runner going to 2B is no longer forced and thus must be tagged. If she is alert, she will get herself into a *run-down* by stopping in between the bases and making the fielders come to her. If she can avoid being tagged (or going out of the base-path) until after you've crossed home, your run does count.

4. Fielding

Fielding is the most interesting part of the game, because it's always different, you're always thinking. As you ask yourself the timeless questions: "where should I be playing, what am I going to do with the ball if it's hit to me, and what do I do if the ball's not hit to me?" the answers depend on your position, who's on base and how fast they are, how many outs there are, who's the batter, *etc.* There's not room here to go over all possible permutations, so we'll just first give some rules of thumb and then briefly list some things to keep in mind by position.

Rules of Thumb

- Talk to each other — especially *call* for balls that you plan to catch, so that other teammates know where you are and don't collide with you. In 7 years of CfA softball, the only actual injury I saw was when our SS and LF underwent an inelastic collision on an ordinary shallow fly ball to short left-field; result = broken cheekbone for the SS (proving once again the real danger comes from other astronomers, not the ball). If you see a dangerous situation developing, you should call someone off even if you're not involved. The clearest way is to shout out the position name of the person who should continue to play the ball. Infielders should make sure each other understands what each intends to do, before the batter actually hits the ball to them ("if he hits it to you, I'll cover ..."), and reminding each other where the force plays are.
- Keep the force play in order if possible: prevent the runner from advancing another base from where she wouldn't be forced. Life will be so much easier when the next batter comes up. The figures (a) – (g) reproduced below summarize where the force plays are for all possible base-occupation states (there's always a "force" at 1B): occupied bases are black, and possible force plays have blue undershading.
 - A corollary: keep the ball in front of you. Sometimes it can be just as important to knock the ball down as it would be to field it cleanly.
 - And another: don't make unnecessary throws. Often holding the ball and *running it in* towards the middle of the diamond is just the thing to calm the situation. Also, space-like throws are, er, seldom possible — no point in throwing if the play is not in the ball's forward light-cone.



- Technique tenets (below assume a right-handed person; reverse right/left for a left-hander)
 - Catch balls on the fly with two hands: this doesn't mean let your right hand get in the way of the glove on your left hand, but rather use your right hand as a kind of a lid to keep the ball from popping out (especially for balls hit with lots of spin).

- Step off from your back foot (right foot for right-handers) when throwing: the extra zip you can get on the ball will almost always make up for any added time you may require to get your balance/take an extra step to set your back foot properly (not to mention that the throw will probably go where you wanted it to, rather than a significant fraction of a radian off-line). “Haste,” as they say, “makes waste.”
- Bend from both the waist and knees when fielding grounders: get your glove almost jammed into the ground (it’s much easier to come up on the ball than go down) and keep your butt low.

Positioning: The figure on p.1 shows the “default” positions for each of the fielders. Notice that the infielders are not playing directly on top of their respective bases. Besides making collisions more likely (since they would be directly in the way of base-runners), this also increases their *ranges* — by moving off the line you increase the proportion of batted balls you can reach (no sense playing directly on the foul line since the batter can’t get a hit with a foul ball; you’ve essentially halved your range). Also on the figure are red and green arrows. These show the general sense of defensive *shifts* in response to a right-handed (red) or left-handed (green) batter. Batters don’t generally hit the ball symmetrically, statistically speaking. A batter’s general tendency is to *pull* the ball (a right-handed batter [*RHB*] hits to the left side, and a left-handed batter [*LHB*] to the right side), so by moving to one side, you’re realigning yourself with the expected azimuthal distribution. Also, hits to the *opposite field* (the right side for a RHB, and *vice versa*) are generally not as powerful as those that are pulled, so opposite-field fielders can usually move in some. Obviously, every batter has different trends, and you can refine these shift parameters (left/right, in/out) with more observations (the orientation of her stance, how she’s hit previously, *etc.*). Finally, to be able to get a good *jump* on the ball, you should be able to see the batter swinging the bat from where you’re standing. If you can’t, move so you can or tell your teammate to move if he’s the one blocking your view.

Thoughts by Position: Below are some things to keep in mind when playing a specific position. Obviously, these kinds of things make more sense in the context of a game, so they take some practice to get used to. We can go over more detailed points of technique/more exhaustive situations elsewhere if there’s any interest.

- Pitcher

- A slower pitch with more arc will generally lead to more ground balls and/or pop ups because mistimed swings result in hitting the pitch when it is at a significantly different height than expected (significant $\simeq 2$ cm). And since the batter has to supply more of the energy, it’s likely you’ll earn some appreciation from your OF who may not have to sprint after balls hit over their heads so much. Anyway, since there are no strikes and the batter can wait as long as he wants to hit something, there’s little point in imagining that you’re Nolan Ryan.
- **Wait** for your fielders to be ready, especially if they’ve just had to run a few pc to track down your latest *gopher ball*. Look behind you before you pitch to make sure everyone’s set.
- On a grounder hit to the P, throw to the highest base where there’s a force play — you’ve got plenty of time.
- Move to cover 1B on grounders hit to the right side. The first-baseman may be too far away from the bag after fielding to beat the runner. If you’re covering, he can toss the ball to you and you can tag the bag. You have to be careful about how you approach 1B if the play will be close. Conceivably, the same could be said about covering 3B when there’s a force there, but I’ve never seen it happen.
- Back up 3B or home if it’s likely there will be a play at either of those bases.

- Catcher

- To have a better chance of keeping foul balls/bad pitches out of the woods directly behind the plate, move back away from the batter. Since there’s no stealing, there’s no point in playing as close as a baseball catcher. Also, there’ll be less chance of being hit by an errant bat.

- If you're feeling especially frisky, on ground balls you can run down to first along with the batter in order to back up the throws from the IF.
- Be the fair/foul judge — if a hit looks like it will be close, stand on home and look down the line. Since there aren't lines drawn on the grass, you'll have by far the best view.
- On little dribblers just in front of the plate (that aren't going to go foul), get a force at home or 3B if it exists, otherwise go to 1B.
- Covering home on a force: give the infielder a target to the infield side of home (shorter throw; you'll be out of the runner's way). For covering the base on a force, see 2nd point under 1B below.
- Covering home on a non-force: stand on the infield side of the plate to receive the throw, and sweep the tag to your left and maybe backwards into the base-path.
- If the batting team is *catching for themselves* because we don't have enough people, your honor as a sportsman/sportswoman really should lead you to cover plays at the plate as though you were on the other team (no point in getting carried away and catching foul pops, though).
- First Base
 - Play off the line, usually also a few steps behind the bag. You should be close enough to get back to the base comfortably before the runner.
 - Positioning yourself to receive the throw from the IF (for right-handers): right foot touching the corner of bag closet to throwing fielder (leaving the runner full access to cross the base without stepping on your foot/ankle/Achilles' tendon); step towards thrower with your left leg (without jeopardizing your balance because you may have to react to a bad throw); hold your glove up where it's comfortable for you to catch (to provide the thrower with a target); anticipate a bad throw (then you can only be pleasantly surprised). Give the C a target to the fair-side of the base.
 - If the throw is off-line enough, it's more important to block the throw (keeping the force play alive at 2B) than to try for some super-human stretch keeping your foot on the bag. Move off the bag early enough to give you a decent chance to keep the ball in front of you.
 - Cover the bag (as above) on every grounder, even if the first throw goes to another base — you want to leave the option of getting a double-play.
 - Grounder hit to the 1B: throw home if a force (or you really need to prevent the run); maybe to 2B if a force (requires a awkward little pivot for right-handers); usually just step on 1B.
 - Grounder hit to your right: this is the trickiest play, since going after it would take you away from the base. If the pitcher remembers to cover, give her a gentle underhand toss as she's running to the base (leading her so she doesn't have to reach backwards for the ball). Even if P forgets to cover, it's still better that you kept the ball from going into RF (the runner on 1B has to stop at 2B, keeping force plays alive).
- Second Base & Shortstop (grouped together since they're jointly responsible for covering 2B, and there is a good deal of symmetry between their roles depending on the handedness of the batter and/or the direction of the hit.)
 - With a RHB at-bat, the SS plays a little deeper and moves more into the *hole* (ditto the 2B for a LHB) as shown on the p.1 figure. Without a runner at 1B, the SS could well be playing half-way between 2B & 3B for a RHB; similarly for the second-baseman between 2B & 1B for a LHB.
 - With a runner on 1B (*i.e.*, force at second): the 2B covers the bag on a grounder hit to the left side; the SS covers the bag on a grounder hit to the right side. They both may want to cheat in towards the base to be sure of getting there in time. For covering the base on a force play, see the 2nd point for 1B above. When the SS is receiving a throw from the 1B, the trickiest bit is finding an unobstructed line-of-sight around the runner.

- A softball double-play is much easier 4-6-3 because the SS is already moving towards 1B as he tags 2B; a 6-4-3 double-play requires a tricky pivot from the second-baseman.
 - Pop-ups directly behind 1B/3B are more easily handled by the 2B/SS, respectively (they have a better angle on judging where the ball will come down); they should call for the pop-up early and loudly.
 - On a grounder to the 2B/SS: Usually, it's best to get the force at 2B if it exists, and then hope for the double-play at 1B. A play at third 6-5 is possible, but often awkward. Plays 4-5 are almost never attempted. Plays at home (even a force) are tough unless you were already playing in (almost even with the bag).
 - On hits to the outfield the SS (left side) or the 2B (right side) goes out about a quarter/third of the way to get the *relay throw* from the OF. The other one covers 2B, **and** shouts instructions about what the *relay man* (= *the cut-off*) should do with the ball (*i.e.*, “THIRD! THIRD!” or “HOLD IT, NO ONE’S GOING”, *etc.*), since the cut-off’s back is turned to the runners.
 - When covering 2B on a non-force play (from the OF), don’t get in the runner’s way. Stand just on the outfield-side of the base closest to the thrower, and sweep the tag back into the base-path.
- Third Base
 - Play off the line 3–4 steps, behind the bag for a RHB. Play more in (almost even with the bag) and more over towards the hole for a LHB (they are quicker to 1B because they’re starting closer, and the follow-through of their swing directs their momentum towards 1B as well — so you’ll want a shorter throw).
 - Cut weakly hit grounders off in front of SS if you can. Because the SS is probably playing more deeply than you, you’ll get there first, and your momentum will be more directed towards 1B, helping your throw.
 - On a grounder to 3B, get the force at home, 3B, or 2B (in order of preference) if one exists. If you need a double-play, and the ball is hit close to the bag, 5-3 is much easier than 5-4-3 or 5-2-3. The 5-3 throw can be long; make sure your back foot is set well and throw off it.
 - Covering the base on a force: see 2nd point under 1B above.
 - Covering the base on a non-force: straddle the base just behind it (towards foul territory), slap the tag straight down.
 - Outfield
 - Get the ball back in to the cut-off man as quickly as possible.
 - Throw directly to a base (bypassing the cut-off) only if you think you have a good chance ($\gg 1\%$) of throwing the runner out there (one who’s tagging up, going back because he didn’t, *etc.*).

The Short Fielder: Depending on the circumstances, there are typically 4 places to put the short fielder: play as though you have four outfielders, all at the same depth (for batters who usually kill the ball); in the middle of the LF-CF-SS triangle (for a normal RHB tending to pull); in the middle of the RF-CF-2B triangle (for a similar LHB); or right behind the second-base bag, with the SS and 2B now freed up from having to cover the bag & able to play more in their holes (for batters who usually hit grounders, or when you really need the double-play). As such, the short-fielder gets to run around a lot as batters change.

5. Outfield Play (Bryan Henderson; transcribed from notes by BC)

With the slow pitch of the softball, players will likely “pull” the ball (*i.e.*, hit to the side of the field closest to them). Thus, right-handed batters (red feet in figure 1) will on average hit to left field. Outfielders should shift to their right (red arrows in figure 1): LF guards against hits down the left-field line, CF cheats towards the left-center *power alley*, and RF moves over into right-center. For left-handed batters (green feet in figure 1), simply reverse the positioning adjustments above.

When facing a power hitter, remember that a ball that lands in front of you is much less damaging than one that sails over your head. Thus play back. Give yourself a small enough cushion so that you have enough time to reach any ball outside of a home run. When facing a *contact hitter*, you can move in more because of the increased likelihood of shorter hits, maybe 1/3 of the way to the infield (& almost never more than halfway). In principle, what you’re trying to minimize is the weighted integral of balls landing in front/behind you over the batter’s PDF for hit-length, where $w_{\text{bhind}} \gg w_{\text{frnt}}$. Specific game situations may alter these weights, of course.

When positioning yourself to catch a fly, always take your first step back. It is easier to correct a misgauged ball by running forward than it is by running back(ward). As you gauge the flight of the ball, it is optimal to allow a slight offset between you and your estimated point of interception with the ball. Why? So you can have the ability to have your weight (& hence your momentum) going towards the direction you’ll wish to throw (*i.e.*, the infield). This makes your relay throw easier. Fielding a ground ball in the outfield uses the same techniques as described in §.4 for infielders, only here you are the last line of defence. Sacrifice your body if you have to!— just don’t let the ball get by you since that is when the batter can make serious advances around the basepath.

Relaying a throw to the infield:

- LF:
 - Your cut-off will likely be the SS (or perhaps the SF).
 - You can throw directly all the way to 2B or 3B on shorter hits.
- CF:
 - Your cut-off will be the SS for throws to 3B and for throws home or 2B for balls hit to **your** right.
 - Your cut-off will be the 2B for throws to 1B (rare — maybe for doubling off an over-enthusiastic runner) and for throws home or 2B for balls hit to **your** left.
 - Except for very deep hits, you could probably throw directly to 2B without a cut-off. Expect the middle infielder not taking the cut-off to be on/near the bag.
- RF:
 - Your cut-off will likely be the 2B (or perhaps the SF).
 - You can throw directly to 2B on shorter hits. Direct throws to 3B from RF almost never work out in softball, unless you’re playing very shallow indeed. However, a quick direct throw to 1B may double off a straying, inattentive runner — this could easily be a shorter throw than the SS or 3B might have on an ordinary grounder.