



NCA Field-Weighted Points System

Explainer & FAQ

Effective for the 2026–27 NCA Tour Season

Brief

For the last two years the National Crokinole Association (NCA) has determined its Tour Standings based on a Tiered Points structure, where each tournament was pre-assigned a Tier of 1, 2 or 3, and players were awarded points for each event played based on the Tier of the event and their final rank in the event.

The NCA is changing its Tour points system for the 2026-27 season to a system that will award a different number of points based on the collective strength of the players competing in the event. This will be referred to as Field-Weighted Points (FWP). Events will still be assigned a Tier of 1, 2 or 3, but the Tier will only play a factor in setting a guaranteed minimum number of points that will be awarded in the event.

Points & Tier Structure

The Rating System

The NCA will maintain a player rating system which will be used to determine the collective strength of an event. This rating system, referred to as FlickSkill, is a specialized variant of a widely used rating system called TrueSkill Through Time (TTT). FlickSkill determines a player's rating (μ ; pronounced "mu") and the uncertainty of that rating (σ ; "sigma") based on the placement that a player achieves in tournaments, and the strength of their opposition in those tournaments.

A player's FlickSkill rating combines performances in both singles and doubles events.

After competing in a tournament, a player's rating will be adjusted up or down based on how they performed compared to how the FlickSkill model predicted they would perform given their rating going into the tournament. If a highly rated player has a poor result, their rating will decrease. When a player out-performs their rating, their rating will increase. The FlickSkill model considers not only a player's final placing in the tournament when adjusting your rating, but also the skill rating of the players who finished above and below them. So, a highly rated player who finishes 1st against a field of weaker players will not see a significant increase in rating. But finishing 3rd or 4th against a very strong field of players may result in a higher ratings increase.

The "uncertainty" parameter (sigma) helps the FlickSkill model to adjust its performance predictions by incorporating a number of factors such as: how much data the system has on a given player (play more often, sigma goes down), and how long it has been since a player last played (uncertainty goes up if you haven't played in a long time).

FlickSkill can be updated using either the final tournament standings or complete head-to-head game results, depending on what data the tournament provides.

A player finishing 1st in a large tournament with many highly rated opponents will contribute to them having a higher rating than if they finished 1st in a smaller tournament of lower rated opponents. In fact finishing 2nd, or some lower placement, in some highly competitive events will be more beneficial for a player's ratings, compared to finishing 1st in other events.

The Tour Points

The points for finishing 1st in an event are determined by the average of the top 20 FlickSkill ratings of the players competing in the event for a singles tournament. For a doubles tournament, the average of the FlickSkill ratings of the top 10 teams is used (each team's rating = 60% of the higher-rated partner + 40% of the lower-rated partner).

Points for further placements then scale down from the 1st place points based on

- the size of the field — finishing in the same place is worth more at a larger event, because the player has beaten more opponents to get there, and
- the "field depth" of an event which is determined by the average FlickSkill rating of the players ranked below the median of the field for singles, or the teams ranked below the median of the field for doubles.

The Tiers

Tournaments will still receive a Tier designation of 1, 2 or 3, and will still be indicative of a combination of the quality of the competition and the organizational strength of the tournament.

The Tier designation of a tournament does not cap the number of Tour points that are awarded. In other words, since the points are entirely determined by the ratings of the players who actually compete, a Tier 3 event with strong attendance can award more Tour points than a Tier 1 event with a thin field if a very strong field of players shows up to the Tier 3.

The Tier designation of a tournament does, however, establish a guaranteed minimum number of Tour points that will be awarded. With Tier 1 having the highest guaranteed minimum, followed by Tier 2, and then Tier 3.

Tournaments with experimental formats used to be designated as a Tier 3. This is no longer the case. Tiers will now be set regardless of whether the tournament uses a format approved by the NCA, or an experimental one. However, the NCA will set a cap on the number of points awarded for any event with an experimental format.

Frequently Asked Questions (FAQ)

Why is the NCA Board making this change?

In an effort to welcome more tournaments into the NCA Tour, the Board introduced a Tiering system two years ago. The Tour exploded from about 10 events mostly in Southern Ontario, to over 40 events around the world. While the Tiering system led to a fantastic expansion of the Tour, the opportunities for new tournaments to move up to higher tiers (and thus be worth more points) has been limited. In an effort to maintain competitive integrity and create transparency in tournament status the Board has decided to introduce this new system.

The new points system more accurately reflects the field strengths of various tournaments, and therefore allows the NCA Tour standings to be more reflective of the players who are performing the best in the most difficult tournaments.

It also provides a more objective roadmap for tournaments to be accelerated through the Tiers, and regardless of their Tier assigned, does not prevent an event from having a large number of points awarded for it.

What do the FlickSkill ratings look like now?

The FlickSkill ratings have been built using all NCA events going back to WCC 2016. The current ratings can be viewed here: <https://www.nca-crokinole.com/ratings>. As events are played in subsequent NCA seasons, a player's rating will be updated to reflect their most recent performances.

The FlickSkill ratings are different from the NCA Tour standings. The FlickSkill ratings are designed with the intent of recognizing the best players at a precise moment in time. The Tour standings will still be used to determine the NCA Tour Champion and reflects the best players over the course of the entire NCA season.

When possible, the FlickSkill ratings will also include results of non-NCA events. The intention of this is to ensure when a player outside of the NCA attends an event, their rating will be established within the FlickSkill system and thus their attendance will appropriately be reflected in the points awarded for the tournament.

What are some examples of the points awarded for tournaments in the last season?

The Elmira Winter Classic was one of the most competitive events on this season's NCA Tour. Under the new points system it awards 66.8 points to the winner, 59.1 for 5th, and 52.0 for 10th. Across all Tier 1 events this season, winner totals fall between roughly 60 and 67 points.

The Florida State Championship was one of the smallest events on this season's NCA Tour and comprised mostly of players with little tournament experience. Under the new points system it awards 20.0 points to the winner, 9.4 for 5th, and 2.4 for 10th. The winner's total is lifted by the guaranteed minimum for a Tier 3 event.

The precise formula to calculate the points for each tournament is available in the bottom section of this document.

What are the guaranteed minimum number of points awarded for each Tier?

Tier 1 events guarantee at least 40 points for 1st place, Tier 2 at least 30, and Tier 3 at least 20. See “The Tiers” above for what each Tier means.

Are Doubles treated differently than Singles?

Yes. The points awarded for 1st place in a tournament are based on an average of the top 20 players' ratings for singles, while for doubles the average of the top 10 teams is used. The rating for a doubles team is calculated as 60% of the higher ranked player, and 40% of the lower ranked player.

Also in a doubles event, the points awarded for positions other than 1st scale down faster than in a singles event, in a similar manner to the historic NCA scoring system.

How are recreational events handled?

Recreational events use the same FlickSkill ratings as Competitive — a player carries one rating across both. Recreational tournaments are run with the same points formula and floors, but Recreational standings, the Recreational Tour Champion, and the “best events” count (4 instead of 5) are tracked separately. Season standings using FWP for Recreational division will be kept separate from the Competitive division as they have been in the past.

Will the determination of Tournament Tiers Change?

Yes. A new Tier Requirements document has been published with all the details. To summarize the changes though, a tournament which can meet the points floor of a higher Tier, and satisfy the other organizational requirements the NCA stipulates, will be awarded that higher Tier in a subsequent season.

I did well in the last tournament, why didn't my rating go up?

FlickSkill attempts to assign you and every other player as accurate a rating as possible, reflective of your current ability. If you perform well, but your rating goes down, it's likely indicative that you did not perform as well as your rating before the tournament suggested you would. For example, you may finish 3rd in a tournament, but if 1st place and 2nd place were players with a lower FlickSkill rating than you, likely your FlickSkill rating will decrease.

Will there be changes to this structure in the future?

The NCA Board will continue to evaluate in the future if improvements to the points or ranking system can be made. No changes will be made to the points system in the middle of the season.

Why use FlickSkill and not something like Elo?

FlickSkill (or TrueSkill) is more capable of establishing an accurate rating for new players faster than an Elo system, which usually requires a new player to play many games to achieve an accurate rating.

FlickSkill also works well to incorporate both doubles and singles into one combined rating and is also able to factor in that players in different locations generally play opponents of different skill levels.

If my doubles partner is lower rated, does that negatively impact my FlickSkill rating?

FlickSkill not only incorporates the skill of your opponents, it also incorporates the skill of your doubles partner. The overall rating of your doubles team is determined by 60% of the higher rated player, and 40% of the lower. Like a singles tournament, if your doubles team is able to out-perform doubles teams with a higher rating, then your FlickSkill rating will increase. However, for the purposes of calculating season points using FWP, doubles teammates both receive the same number of points.

When will we know how many points are available for a particular tournament?

The Tier of a tournament will provide you with a guarantee of the minimum number of points available for a tournament months in advance.

Additionally, FlickSkill ratings are locked at the start of each calendar month. Every tournament played during that month uses those locked ratings, regardless of any tournaments or results that arrive later in the month.

This cut-off will ensure that on the morning of a tournament, based on the players in attendance, the number of NCA Tour points available for 1st place and all subsequent positions will be known.

Terminology

This section defines the three quantities used to compute Tour points: the Field Strength Index (FSI), the Field Depth Index (FDI), and Field-Weighted Points (FWP). All three are derived from the pre-event FlickSkill ratings of the players entered in a tournament.

Field Strength Index (FSI)

FSI measures how strong the top of a tournament's field is. The system averages the pre-event FlickSkill ratings of the strongest entrants — the top 20 players in singles or the top 10 teams in doubles — divides by 3.3 and applies a floor that depends on the event's Tier (Tier 3 = 0.40, Tier 2 = 0.60, Tier 1 = 0.80). There is no ceiling for standard NCA-approved events; experimental-format events may carry a separate cap (see “The Tiers” above).

In doubles, each team's rating is a blend of its partners: 60% of the higher-rated partner plus 40% of the lower-rated partner. The stronger partner is weighted more without dismissing the weaker one.

Setting	Value	What it does
Number averaged	20 / 10	Top players (singles) or top teams (doubles). For tournaments smaller than this, all entrants are used.
Divisor	3.3	Puts a typical strong-field event near 1.0.
Floor	0.40	Lowest FSI a Tier 3 event can earn (Tier 2 = 0.60, Tier 1 = 0.80; see Section 1).
Ceiling	none	No upper limit for standard events. Special-format events may have a separate cap.

Field Depth Index (FDI)

FDI measures how deep a tournament's field runs — specifically, how strong the back half of the draw is. The system averages the pre-event ratings of every player ranked below the field median, divides by 2.0, and caps the result at the 0–1 range.

A high FDI means the back of the field is still strong (a “deep” event); a low FDI means the field drops off sharply after the top seeds. FDI feeds the depth-lift term in the points formula below, so deeper fields produce higher payouts at non-winning placements.

Setting	Value	What it does
What's averaged	Below the median	Every player ranked from $LN/2J+1$ down to last place.

Setting	Value	What it does
Divisor	2.0	Normalizes the average rating onto a 0–1 scale.
Floor	0.00	Lowest FDI an event can earn.
Ceiling	1.00	Highest FDI an event can earn.
Small-field rule	FDI = 0	For tournaments below the depth threshold (20 singles / 10 doubles) there isn't enough below the top tier to give a meaningful depth signal.

Field-Weighted Points (FWP)

FWP combines an event's FSI, its size, and its FDI on a percentile-based decay curve. Let **place** denote the player's finishing position and **field size** the number of entrants who actually started competition.

Quantity	Formula	Meaning
Winner points	$FSI \times 50$	Points awarded to first place before the placement curve is applied.
Percentile	$1 - (\text{place} / \text{field size})$	Finishing position expressed relative to the number of entrants.
Base	$\text{percentile}^{\text{decay}}$	Primary decay curve from first place through the rest of the field.
Ratio	$\min(1, \text{base} + \text{depth lift} \times \text{FDI} \times (1 - \text{base}))$	Depth-adjusted multiplier, capped at 1.0.
FWP	$\max(\text{floor}, \text{winner points} \times \text{ratio})$	Final Tour points after applying the minimum floor.

Setting	Value	What it does
Decay	1.7 / 2.3	How steeply points drop from 1st to last. Doubles is steeper because fields are smaller and rank out faster.
Depth lift	0.40	How much a deep field (high FDI) boosts non-winner placements.
Floor	1.0 point	Every result earns at least one point.
Winner multiplier	50	1st place earns $FSI \times 50$ points.

An interactive illustration of the curve under different FSI, FDI, field-size and decay values is available at <https://www.nca-crokinole.com/simulator>.

Tour Points & FlickSkill Rating Parameters

A reference listing of every parameter governing NCA Tour points and FlickSkill ratings, together with the value currently in effect for the 2026–27 NCA Tour season.

Section 1. NCA Tour Standings

Current Tour standings are published at <https://www.nca-crokinole.com/standings>.

Events counted

A player's season Tour Points total is the sum of their best tournament results — the rest are dropped. Entering a weaker tournament cannot reduce a player's standing.

Division	Best events counted	Notes
Competitive	5	Best 5 FWP results count toward the season total.
Recreational	4	Best 4 FWP results count toward the season total.

Tier minimums

Tier 1 events guarantee at least 40 points for 1st place, Tier 2 events at least 30, and Tier 3 events at least 20 — see “The Tiers” above for how each Tier is assigned.

Tiebreaker procedure

Tied points totals are broken only for the top 3 positions on the Tour; deeper ties stand. The procedure is applied in order, stopping as soon as one player is ranked higher.

Step	Rule
1	Most 1st-place finishes among the player's best Tour results.
2	If still tied, most 2nd-place finishes.
3	If still tied, most 3rd-place finishes — and so on through deeper places — until the tie is broken or the records are perfectly equal.
4	If still tied, the higher rank is awarded to whichever player finishes higher at the NCA Finale event (default: WCC Singles). Players not in attendance at the Finale rank below those who attended.
5	If neither tied player attended the Finale, the tie remains unbroken in the final standings.

Recreational category

A player may win the NCA Recreational Tour title only once. Subsequent Recreational Tour wins do not award the title. The NCA does not regulate which division a tournament admits a player to.

Section 2. Timing of Calculations

Rule	Specification
Monthly rating freeze	FlickSkill ratings are locked at the start of each calendar month. Every tournament played during that month uses the ratings as they stood at the lock — results that come in during the month update ratings going forward but don't change the field strength for in-month events.
Field size source	Determined from the number of players or teams that actually begin competition (not those who register).
Earliest FWP availability	FSI, FDI, and therefore FWP for an event can be calculated the moment competition begins.

Section 3. FlickSkill Rating Engine

FlickSkill is the NCA's variant of **TrueSkill Through Time (TTT)**, a Bayesian skill-rating algorithm in which each player's ability is modelled as a Gaussian distribution with mean μ (skill estimate) and standard deviation σ (uncertainty). Tournament results update both quantities for every player in the event, and ratings tighten as more results accumulate. The TTT variant additionally smooths each player's rating curve backward through their full history on every recalculation, so a tournament played today can refine the estimate of where a player stood a year ago.

Every player carries a single FlickSkill rating that combines their singles and doubles results.

Section 3.1 Engine parameters

The values below govern the FlickSkill rating engine itself. They differ from classical TrueSkill defaults ($\mu = 25, \sigma = 25/3$) because TTT operates on a compressed scale centered near zero.

Symbol	Value	Meaning
μ_0	0.0	Initial skill mean for a previously-unseen player.
σ_0	1.667	Initial skill uncertainty (standard deviation).

Symbol	Value	Meaning
β	1.0	Performance noise — per-game variability around a player's true skill. Larger β means individual results carry less weight.
γ	0.015	Skill drift between events — how much a player's skill is allowed to change from one tournament to the next. (Distinct from the FWP γ in the Terminology section.)
ϵ	0.001	Convergence tolerance for the TTT smoothing pass.
max_iter	50	Maximum number of TTT iterations before stopping.
doubles credit weight	0.5 / 0.5	Per-partner contribution to a team's skill update in the rating engine — each partner shares 50% of the team's outcome. (Distinct from the 60/40 team rating used by FSI/FDI in the Terminology section.)
draw probability	0.0	Crokinole results never tie at the tournament-finish level.

Section 3.2 Algorithm

On each recalculation the engine: (i) builds a single chronological sequence of every NCA tournament finish in the rating history; (ii) runs a forward Bayesian update through the sequence to produce posterior estimates entering and exiting each event; and (iii) runs backward-forward smoothing to convergence (controlled by ϵ / max_iter) so that information from later events refines earlier estimates. The smoothed posterior μ entering an event is the rating used by FSI, FDI, and the public Player Ratings page.

Ratified by the NCA Board of Directors May 31, 2026.

References

- Dangauthier, P., Herbrich, R., Minka, T., & Graepel, T. (2008). "TrueSkill Through Time: Revisiting the History of Chess."
- Landfried, G., & Mocsos, E. (2025). "TrueSkill Through Time: Reliable Initial Skill Estimates and Historical Comparability with Julia, Python, and R." *Journal of Statistical Software*, 112(6), 1-41.
<https://doi.org/10.18637/jss.v112.i06>