

A Stat-Drunk Look At TBL

before the 2014 draft

At the turning of the year, the Stat-Drunk Computer Nerd pours a glass of something old and gold, and sits before the fire, contemplating both his tools and the year ahead.

The toolbox

The Stat-Drunk's methods are simple – predict the runs scored by the offense and the runs allowed by the pitching, then use Bill James's "Pythagorean expectation" to predict how many wins will result:

$$\text{Wins} = \text{Games} * (\text{Runs Scored})^2 / ((\text{Runs Scored})^2 + (\text{Runs Allowed})^2)$$

These are the actual results from the 2013 TBL season:

	<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>		<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>
WHT	105	753	538	107	0.98	POR	111	912	621	111	1.00
COL	90	748	710	85	1.06	MAR	93	781	672	93	1.00
BH	65	634	837	59	1.10	NBO	63	657	893	57	1.11
LV	53	599	844	54	0.98	KAN	58	644	815	62	0.94
	<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>		<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>
GOH	85	668	609	88	0.97	ZIO	101	838	624	104	0.97
RYE	78	730	706	84	0.93	MLR	73	855	798	87	0.84
GC	73	746	812	74	0.99	HUD	72	618	784	62	1.16
CAY	69	779	928	67	1.03	MUN	62	605	769	62	1.00
	<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>		<u>W</u>	<u>RS</u>	<u>RA</u>	<u>PW</u>	<u>P acc</u>
BRO	109	844	612	106	1.03	FOG	96	871	696	99	0.97
DET	94	745	608	97	0.97	MID	94	737	606	97	0.97
NW	79	706	697	82	0.96	TAY	75	630	706	72	1.04
DAL	77	703	724	79	0.97	KNX	69	639	812	62	1.11

The "P acc" column on the right shows the accuracy of the Pythagorean expectation applied to TBL's 2013 actual results. Values above 1 indicate more wins than expected, below 1 indicates fewer wins. We see a variation of -16% to +16%. (This is a little wider than MLB's +14% to -8% in the last couple of years.)

My estimates for Runs Scored, Runs Allowed and Wins for 2013 were:

	<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>		<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>
WHT	690 (1.09)	627 (0.86)	89 (0.83)	POR	841 (1.08)	621 (0.87)	104 (0.94)
COL	677 (1.10)	745 (0.95)	73 (0.86)	MAR	730 (1.02)	672 (1.06)	86 (0.92)
BH	649 (0.98)	816 (1.03)	63 (1.07)	NBO	635 (1.00)	893 (0.94)	52 (0.91)
LV	646 (0.93)	801 (1.05)	64 (1.19)	KAN	621 (0.96)	815 (1.04)	61 (0.98)
	<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>		<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>
GOH	705 (0.95)	712 (0.86)	80 (0.91)	ZIO	820 (0.81)	624 (0.98)	97 (0.93)
RYE	758 (0.96)	676 (1.04)	90 (1.07)	MLR	791 (0.92)	798 (0.88)	87 (1.00)
GC	745 (1.00)	777 (1.05)	77 (1.04)	HUD	695 (1.07)	784 (1.04)	74 (1.19)
CAY	776 (1.00)	875 (1.06)	71 (1.06)	MUN	702 (1.11)	769 (1.21)	80 (1.29)
	<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>		<u>eRS (Acc)</u>	<u>eRA (Acc)</u>	<u>eW (Acc)</u>
BRO	845 (1.00)	652 (0.94)	101 (0.95)	FOG	732 (1.15)	696 (0.88)	83 (0.84)
DET	768 (0.97)	629 (0.97)	96 (0.99)	MID	694 (1.07)	606 (1.00)	85 (0.88)
NW	779 (0.91)	612 (1.14)	99 (1.21)	TAY	695 (1.02)	706 (0.99)	73 (1.01)
DAL	734 (0.96)	715 (1.01)	81 (1.03)	KNX	773 (0.91)	812 (0.89)	78 (1.26)

I only got 4 of 6 division winners correct. 7 of 10 playoff teams. Accuracy was between -17% to +29% which is considerably wider than Pythagorus above. There's a pattern there, though – I generally underestimated good teams and over-estimated bad teams, and I'm worse with pitching staffs than with offenses. I'll see if I can improve my methods in the future, but for now I'm stuck with what I have.

Looking Ahead

Considering what I just said (underestimation of good teams), my pre-draft expectation for Brobdingnag (120+ wins) is truly frightening. Looks like Detroit, Gotham City and Whitman (95-100 wins) all have post-season in their stars. The last IC wildcard berth is truly up for grabs – Greater Ohio, Columbus and Rye (80-90 wins) are the favorites in that scrum.

In the National, Portland Midwest and Zion (95-105 wins) rule their divisions, Hudson clocks in with 90+ wins for the first wild-card. The other post-season slot is, as in the other conference, heavily-contested. Knoxville, Munich, Maracaibo (80-88 wins) are all in that mix.

This draft is rich in young talent. Puig is probably the clear #1, but arguments could be made for Profar, Myers, or Fernandez. There's a broad second tier of a couple more big-hitting OFers, a bunch of infielders, at least 3 more top starters. There are a goodly amount of relievers, a couple of interesting young catchers. Strangely, there may be little at first base worthy of consideration.

Here's my guess:

1. **BROBDINGNAG** – wait, what? This team is already stocked. And scary young. Except in the outfield, so they say “Puig” which makes them scarier and younger. **Yasiel Puig**
2. **KANSAS** – isn't contending, but they are starting to show some promise. A big young bat to anchor the OF is probably a great idea, so **Wil Myers**. (And they start to creep to the edge of the last wildcard in the National!)
3. **MUNICH** – If Myers and Puig go 1-2, Paul has a decision to make here. He is a contender, if he wants to be. Profar, the pre-season favorite as this year's #1, is still available, but doesn't add present value. Paul needs quality starts, Jose Fernandez is a 20-year old grade 18 starter with 28 starts, is the difference between an 80-win also-ran and a 90-win serious contender. So Paul yields to temptation and says **Jose Fernandez**.
4. **NORTHBORO** – Let's face it: this is a very bad team. Among other things, it needs a 2B and **Jurickson Profar** will fill that slot for a long time.
5. **BLUE HILLS** – another non-contender, but **Christian Yelich** joining Bryce Harper is beginning to look like a solid outfield.
6. **KNOXVILLE** – if Pat wants to try and keep up with the Munich's, he'll go with **Shelby Miller** here.
7. **GRAND CAYMAN** – Boomer needs starts like Mars needs women. But **Jose Iglesias** is a real upgrade in the infield, with his bat and his glove.
8. **HUDSON** – the first of the real contenders for 2014 TBL second place. A tricky position for Clay – all the big picks on the board for him are pitchers. So I'll say **Julio Teheran**. Take that, Rich.
9. **MELROSE** – another builder. Needs a SS, and **Didi Gregorius** will fill that slot for a long time.
10. **GOTHAM CITY** – Anton has built himself a very nice team. He continues to shore up his infield with SS **Brad Miller**.
11. **TAYLORSVILLE** – A very hard franchise to consider. The Taylor boys have the making of a pretty good pitching staff once they fill out their bullpen. **Nolan Arenado** is a big upgrade at 3B.
12. **DALLAS** – Steve has lots of needs. One of them is a catcher. Voilà! **Travis D'Arnaud**.
13. **RYE** – At this point, the main values in this draft are found among the pitchers, and Craig selects **Gerrit Cole**.
14. **TAYLORSVILLE** again. Someone is going to take **Khris Davis**, so I'm guessing the Taylor boys take him now.
15. **GREATER OHIO** can fill a hole with a legit prospect at 2B - **Anthony Rendon**.
16. **MUNICH** – takes another leap forward with pitcher **Tony Cingrani**.

17. **KANSAS** – is overjoyed to find **Michael Wacha** here in the late first round.
18. **NEW WESTMINSTER** has lots of holes, while he has SS covered, **Jonathan Villar** is a good shot at long-term stability there.
19. **MELROSE** is still in need of middle infield help, and chooses **Nick Franklin**.
20. **GRAND CAYMAN** again, and they take a starter this time: **Zack Wheeler**.
21. **ELDERS OF ZION** – Rich now has both Clay and Paul baying at his heels. I don't believe he will actually say this name but **Jedd Gyorko** would make some sense.
22. **WHITMAN** – Ruling the Clemente, Brian has few needs. A good thing, because he has few picks. **Mike Zunino** is a young catcher with promise.
23. **NORTHBORO** – will take the best young bat on the board **Matt Davidson**.
24. **PORTLAND** rounding out the first round, Ray considers Marlon Byrd, but goes with **Avisail Garcia**.

At the close of the first round the post-season races have changed a bit. There's now a 3-way fight for the Mantle, as Munich benefits greatly, and Hudson improves as well. Knoxville and Midwest are fighting for the Williams, and one of those 5 teams will fail to make the post-season. In the International, Rye has improved a lot, Greater Ohio some and Columbus has fallen back. Detroit has faded some as well, but their post-season prospects remain bright.

A lot of talent still remains for the second round, especially young pitchers. Values both in the infield and the outfield remain. Relief pitchers have not been touched yet.

In conclusion, how does TBL compare to MLB?

How does our shared fantasy universe compare with real life, otherwise known as Major League Baseball? Here's how the average TBL team stacks up against the average MLB team. Many of the differences are expected, but there are some surprises.

B Stat	TBL	MLB	Comments	P Stat	TBL	MLB	Comments
PA	6193	6089	We send more batters to the plate	SV	37	42	fewer saves
AB	5648	5508		CG	21	4	many more complete games
R	727	701	We score more runs, and runs per plate appearance	IP	1457	1445	more innings (?)
H	1431	1402	get more hits (but the same Average)	H	1426	1402	more hits
2B	305	275	more doubles	R	726	701	more runs
3B	32	31	the same triples	ER	658	645	more earned runs (more unearned runs 68-56)
HR	173	164	more HRs	HR	172	164	more HRs
BB	470	490	fewer walks(!)	BB	470	490	fewer walks
SO	1248	1214	more strikeouts	SO	1250	1214	more Ks
IBB	4	35	many fewer IBBs (because we're DH only)	WP	18	51	many fewer WP
SB	72	108	fewer SBs	BK	1	6	many fewer balks
CS	17	38	many fewer CSs (we know the percentages)	ERA	4.06	4.01	a little higher
SH	11	49	many fewer sac bunts (DH-only, and not enough Darrell)	WHIP	1.301	1.309	about the same
SF	32	41	fewer sac flies (!)				
HBP	43	50	fewer hit batters				
GDP	98	120	fewer Dos				
E	104	100	about the same errors				
BA	0.253	0.255	same batting average				
OBP	0.315	0.319	lower OBP(!)				
Slg	0.344	0.405	much higher slugging				
XBH	509	470	and many more XBs				

2014 draft prediction summary

Pre-draft standings:

TM	RS	RA	W
WHT	752	610	98
COL	685	697	79
FOG	680	822	65
BH	691	836	65

TM	RS	RA	W
POR	851	630	106
MAR	685	704	79
KAN	645	735	70
NBO	607	863	53

TM	RS	RA	W
GC	778	617	99
GOH	772	674	91
RYE	704	682	82
CAY	737	808	72

TM	RS	RA	W
ZIO	752	615	97
HUD	764	679	90
MUN	691	715	78
MLR	623	704	70

TM	RS	RA	W
BRO	1018	582	123
DET	852	667	100
NW	573	827	52
DAL	539	888	42

TM	RS	RA	W
MID	791	649	97
KNX	757	694	88
TAY	674	745	73
LV	679	857	62

Round 1 predictions:

Team	Pick	Wins	Top-value players
BROBDINGNAG	Yasiel Puig	+2	Puig, Fernandez, Gennett, Byrd, Mercer
KANSAS	Wil Myers	+6	Fernandez, Ryu, S.Miller, Teheran, Byrd
MUNICH	Jose Fernandez	+10	Fernandez, Ryu, S.Miller, Teheran, Locke
NORTHBORO	Jurickson Profar	+0	Ryu, S.Miller, Teheran, Byrd, Locke
BLUE HILLS	Christian Yelich	+2	Byrd, S.Miller, Ryu, Teheran, Locke
KNOXVILLE	Shelby Miller	+7	Ryu, S.Miller, Teheran, Byrd, Locke
GRAND CAYMAN	Jose Iglesias	+2	Ryu, Teheran, Locke, Archer, Cingrani
HUDSON	Julio Teheran	+5	Ryu, Teheran, Locke, Cingrani, Archer
MELROSE	Didi Gregorius	+2	Byrd, Ryu, Cotts, Avilan, Ju.Wilsoni
GOTHAM CITY	Brad Miller	+2	Mercer, Rendon, Byrd, Sogard, Ryu
TAYLORSVILLE	Nolan Arenado	+2	Byrd, Ju.Wilson, Cotts, Avilan, Carpenter
DALLAS	Travis D'Arnaud	+0	Ryu, Locke, Archer, Cingrani, Kazmir
RYE	Gerrit Cole	+5	Ryu, Locke, Archer, Cingrani, Cole
TAYLORSVILLE	Khris Davis	+2	Ju.Wilson, Byrd, Cotts, Avilan, Carpenter
GREATER OHIO	Anthony Rendon	+3	Byrd, Gyorko, Shuck, Mercer, Ju.Wilson
MUNICH	Tony Cingrani	+5	Ryu, Byrd, Locke, Avilan, Ju.Wilson
KANSAS	Michael Wacha	+4	Ryu, Locke, Archer, Kazmir, Straily
NEW WESTMINSTER	Jonathan Villar	+0	Ryu, Locke, Archer, Kazmir, Straily
MELROSE	Nick Franklin	+3	Byrd, Uribe, Ryu, Mercer, Cotts
GRAND CAYMAN	Zack Wheeler	+5	Ryu, Locke, Archer, Kazmir, Straily
ELDERS OF ZION	Jedd Gyorko	+3	Byrd, Ryu, Uribe, Gennett, Locke
WHITMAN	Mike Zunino	+0	Ju.Wilson, Cotts, Avilan, Carpenter, Byrd
NORTHBORO	Matt Davidson	+1	Ryu, Byrd, Locke, Archer, Uribe
PORTLAND	Avisail Garcia	+2	Byrd, Mercer, Blackmon, Satin, Tuiasosopo

Standings after round 1:

TM	RF	RA	W
WHT	737	622	95
COL	672	711	77
BH	701	852	65
FOG	667	838	63

TM	RF	RA	W
POR	853	642	104
KAN	683	714	77
MAR	672	717	75
NBO	604	880	50

TM	RF	RA	W
GC	786	629	98
GOH	783	687	91
RYE	690	649	85
CAY	736	771	76

TM	RF	RA	W
ZIO	765	627	96
HUD	749	646	92
MUN	678	606	89
MLR	643	717	70

TM	RF	RA	W
BRO	1033	593	123
DET	836	680	98
NW	567	843	50
DAL	527	905	40

TM	RF	RA	W
MID	776	662	94
KNX	743	644	92
TAY	696	759	73
LV	666	873	58