

Challenges of Transitioning From the Weight to the Hammer.

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A review and analysis of an
Auburn Weight/Hammer
Throw's three year training
program: Jake Dunkleberger.

Technical Elements of All Throws:

- Posture
- Balance
- Rhythm
- Implement Speed

The hammer

- is different from all other throwing movements.
- has different sequence of body movements.
- leads the throw not the body.
- is more like a golf or bat swing than a throw.

The movement begins with active action of the arms-shoulders-trunk, as a consequence the implement leads, and only after this does the work of the legs begin.

Challenges

Weight vs. Hammer

- Radius
- Weight of Implement
- Orbit
- Over turning
- Dragging implement
- Flat

Annual Performances:

Name: Jake Dunkleberger

D.O.B: Oct. 6, 1985

YEAR:	WEIGHT:		HAMMER:			SHOT PUT:			DISCUS:		
	25#	35#	5.5 kg	6kg	7.26 kg	5.5 kg	6 kg	7.26 kg	1.6 kg	1.75 kg	2 kg
2002	18.89					17.04			56.20		
2003	21.52	16.79	66.74	61.94		18.13			56.11		
2004		19.33			65.11						
2005		19.14			65.86			16.99			
2006		22.36			71.34			18.18			
2007		21.87			71.87			17.47			
2008		22.24			72.98			17.39			

2006 PERFORMANCES:

Jake Dunkleberger

Weight:

19.49i		4 Ky Inv	Lexington KY	1/13/06
20.54i		1 Clem Inv	Clemson SC	1/20/06
19.02		5 Pepsi Inv	Gainesville FL	2/5/06
20.61i		3 Tyson	Fayetteville AR	2/11/06
22.36i	PB	1 Qualifier	Ames IA	3/4/06
22.17i		5 NCAA	Fayetteville AR	3/11/06

Hammer:

65.21		2 Aub Inv	Auburn AL	4/22/06
66.99		2 Golden Knight	Orlando FL	4/29/06
70.84		2	Marietta GA	5/14/06
71.34	PB	1	Marietta GA	6/4/06
70.33		1 Indianapolis Open	Indianapolis IN	6/10/06
66.65		11 NC	Indianapolis IN	6/23/06
66.91		2 NACAC	Santo Domingo	7/9/06

Jake Dunkleberger
2005-2006 Marco Planner

Phase:	Sub-Phase	Meso:	Micro:	Date:	Competitions:	Results:	
GPP I	GENERAL	1	1	5-Sep -11			
			2	12-Sep -18			
			3	19-Sep -25			
			4	26-Sep -2			
SPP I	SPECIAL I	2	5	3-Oct -9			
			6	10-Oct -16			
			7	17-Oct -23			
			8	24-Oct -30			
		3	9	31-Oct -6			
			10	7-Nov -13			
			11	14-Nov -20			
			12	21-Nov -27	Thksgiv'g Brk	WT 20.75M* PR; HT 67.80M* PR	
	4	I		13	28-Nov -4		
				14	5-Dec -11	Final Exams	
				15	12-Dec -18	Final Exams	
				16	19-Dec -25	Xmas Break	
COMPETITION	PRE-COMP I	5	17	26-Dec -1	Xmas Break	WT 20.45M*; HT 64.88M*; SP 16.50M	
			18	2-Jan -8	Xmas Break		
			19	9-Jan -15	Kentucky Invite	WT 19.49M; SP 17.04M PR	
			20	16-Jan -22	Clemson Invite	WT 20.54M; SP 16.59M	
	COMP I	6	21	23-Jan -29			
			22	30-Jan -5	Florida Invite	WT 19.02M; SP 16.40M	
			23	6-Feb -12	Tyson Invite	WT 20.61M; SP 17.60M PR	
		7	24	13-Feb -19			
			25	20-Feb -26	SEC Indoor	WT FOUL; SP 18.18M PR	
			26	27-Feb -5	Iowa State Last	WT 22.36M PR	
27	6-Mar -12	NCAA Indoor	WT 22.17M				
TRANS. SPP II	Active Rest SPECIAL II	8	28	13-Mar -19			
			29	20-Mar -26			
			30	27-Mar -2			
			31	3-Apr -9			
			32	10-Apr -16			
COMPETITION II	COMP II	9	33	17-Apr -23	Auburn Invite	HT 65.21M	
			34	24-Apr -30	Golden Knight	HT 66.99M	
			35	1-May -7			
			36	8-May -14	Armed Forces Invite	HT 70.84M* PR	
		10	37	15-May -21			
			38	22-May -28			
			39	29-May -4	Golden East Invite	HT 71.34M* PR	
		11	40	5-Jun -11	Indianapolis Open	HT 70.33M PR	
			41	12-Jun -18			
			42	19-Jun -25	USATF Sr.	HT 66.65M	
TRANS. Active Rest	AR	AR	43	26-Jun -2			
			44	3-Jul -9	NACAC Under-23	HT 66.91M	
			45	10-Jul -16			
			46	17-Jul -23			
			47	24-Jul -30			

* Questionable landing area

2006 Technical Evaluation:

Problems:

- Left shoulder
- Heavy on right leg
- Left leg too straight
- Over turning
- Dragging implement

Correction Cues :

- Ball out & around – Push ball w/ Rt. side/hands/knees
- Knee angle left leg (flexion)
- Turn as a unit (synchronizing)
- Rt. Side driver(hands, knees, & feet)
- Ball turns body not body turning ball.

2006 Training Evaluation:

- 40 weeks in NCAA season.
- Started throwing weight 12/12/05
- Threw weight no hammer from 12/12/05 to 3/12/06 NCAA Indoor Championships (13 weeks)
- 13 out of 40 weeks throwing weight.
- PR from 19.33m to 22.36m.
- Redshirting outdoors had 6 weeks with hammer before first meet.

2007 PERFORMANCES:

Jake Dunkleberger

Weight:

20.82i		3 Clem Inv	Clemson SC	1/19/07
21.60i		2q IndR	Bloomington IN	2/2/07
21.19i		2 IndR	Bloomington IN	2/3/07
21.87i	SB	2 Tyson	Fayetteville AR	2/10/07
21.49i		2 SEC	Lexington KY	2/25/07
21.57i		5 NCAA	Fayetteville AR	3/9/07

Hammer:

69.78		3 Tiger Classic	Auburn AL	4/6/07
68.49		2 Auburn Inv	Auburn AL	4/20/07
64.36*		4 PennR	Philadelphia PA	4/28/07
69.07*		2 SEC	Tuscaloosa AL	5/11/07
68.32		2 Mideast	Columbia MO	5/25/07
66.85		3q NCAA	Sacramento CA	6/6/07
71.87	PB	1 NCAA	Sacramento CA	6/8/07
70.96		5 NC	Indianapolis IN	6/22/07

Jake Dunkleberger
2006-2007 Marco Planner

Phase:	Sub-Phase	Meso:	Micro:	Date:	Competitions:	Results:
GPP I	GENERAL	1	1	4-Sep -10		
			2	11-Sep -17		
			3	18-Sep -24		
			4	25-Sep -1		
SPP I	S P E C I A L I	2	5	2-Oct -8		
			6	9-Oct -15		
			7	16-Oct -22		
			8	23-Oct -29		
		3	9	30-Oct -5		
			10	6-Nov -12		
			11	13-Nov -19		
			12	20-Nov -26	Thksgiv'g Brk	
		4	13	27-Nov -3		
			14	4-Dec -10	Final Exams	
			15	11-Dec -17	Final Exams	
			16	18-Dec -24	Xmas Break	
C O M P E T I T I O N	PRE-COMP I	5	17	25-Dec -31	Xmas Break	
			18	1-Jan -7	Xmas Break	
			19	8-Jan -14		
			20	15-Jan -21	Clemson Invite	WT 20.82M(3); SP 16.59M(3)
	COMP I	6	21	22-Jan -28		
			22	29-Jan -4	Indiana Relays	Q WT 21.60M(2q); F WT 21.19M(2)
			23	5-Feb -11	Tyson Invite	WT 21.87M(2) SB; SP 16.61M(13)
			24	12-Feb -18		
			25	19-Feb -25	SEC Indoor	WT 21.49M(2); SP 17.20M(9) SB
			26	26-Feb -4		
27	5-Mar -11	NCAA Indoor	WT 21.57M(5)			
TRANS.	Active Rest	8	28	12-Mar -18		
SPP II	SPECIAL II		29	19-Mar -25		
			30	26-Mar -1		
			31	2-Apr -8	Tiger Classic	HT 69.78M(3)
			32	9-Apr -15		
			33	16-Apr -22	Auburn Invite	HT 68.49M(2); SP 17.47M(2) PR
C O M P E T I T I O N II	COMP II	9	34	23-Apr -29	Penn Relays	HT 64.36M(4)
			35	30-Apr -6		
			36	7-May -13	SEC Outdoor	HT 69.07M(2); SP 17.25M(7)
		10	37	14-May -20		
			38	21-May -27	NCAA Regionals	HT 68.32M(2); SP 16.94M(15)
			39	28-May -3		
			40	4-Jun -10	NCAA Nationals	Q HT 66.85M(3q); F HT 71.87M(1) PR
		11	41	11-Jun -17		
			42	18-Jun -24	USATF Sr.	HT 70.96M(5)
			43	25-Jun -1		
44	2-Jul -8					
TRANS.	Active Rest	AR	45	9-Jul -15		
46	16-Jul -22					
47	23-Jul -29					

2007 Training Evaluation:

- Threw weight one day per week out of 4 hammer days per week from 10/30/06 to 12/10/06.
- Started throwing weight 12/11/06 no hammer until after 3/11/07 NCAA Indoor Championships (13 weeks)
- Technical problems with weight week 1/29/07.
- Changed 2/5/07 started using the ½ wire.
- Used it in training through NCAA Indoor Championships.

2007 Training:

MESO 7; WEEK 24

DAY #1

II. TECHNIQUE THROWS AND DRILLS:

A) 5-10 MIN. DRILLS

B) WEIGHT: (3T 1/2 WIRE 35#/2T 45# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 40# WT.) SERIES X 4;

(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 4; 6 X 3T(32.5# WT)

DAY #2

B) 4 X WIND & RELEASE W/ 50#; 4 X 2T & RELEASE W/ 50#; 4T 1/2 WIRE 35# X 5

DAY #4

B) 4 X WIND & RELEASE W/ 50#; 4 X 2T & RELEASE W/ 50#; 4T 1/2 WIRE 35# X 5

DAY #5

II. TECHNIQUE THROWS AND DRILLS:

A) 5-10 MIN. DRILLS

B) WEIGHT: (3T 1/2 WIRE 35#/2T 45# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 40# WT.) SERIES X 4;

(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 4; 6 X 3T(32.5# WT)

NO COMPETITION

2007 Training:

MESO 7; WEEK 25

DAY #1

II. TECHNIQUE THROWS AND DRILLS:

A) 5-10 MIN. DRILLS

B) WEIGHT: (3T 1/2 WIRE 35#/2T 40# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 4;

(3T 1/2 WIRE 25#/3T 32.5# WT.) SERIES X 3

DAY #2

B) 4 X WIND & RELEASE W/ 45#; 4 X 2T & RELEASE W/ 45#

DAY #4

B) WEIGHT: (3T 1/2 WIRE 25#/2T 35# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 32.5# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 30# WT.) SERIES X 2-3

DAY #6

SEC CHAMPIONSHIPS: SP 17.20M SB

DAY #7

SEC CHAMPIONSHIPS: WT 21.49M

2007 Training:

MESO 7; WEEK 26

DAY #2

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: (3T 1/2 WIRE 35#/3T 40# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 37.5# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 3

3 X WIND & RELEASE W/ 45#; 3 X 1T & RELEASE W/ 45#

DAY #4

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: (3T 1/2 WIRE 35#/2T 37.5# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 3;

(3T 1/2 WIRE 25#/3T 32.5# WT.) SERIES X 3

3 X WIND & RELEASE W/ 45#; 3 X 1T & RELEASE W/ 45#

DAY #6

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT:

5 X 4T/3T(35# WT); 5 X 4T/3T(32.5# WT); 5 X 4T/3T(30# WT)

NO COMPETITION

2007 Training:

MESO 7; WEEK 27

DAY #1

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: (3T 1/2 WIRE 35#/3T 40# WT.) SERIES X 2;
(3T 1/2 WIRE 25#/3T 35# WT.) SERIES X 3; 5 X 4T/3T(32.5# WT)

DAY #2

II. TECHNIQUE THROWS AND DRILLS:

4 X 4T/3T(35# WT); 4 X 4T/3T(32.5# WT); 4 X 4T/3T(30# WT)
3-6 X 1-2T & RELEASE W/ 45#

DAY #5

NCAA CHAMPIONSHIPS: WT 21.57M (5TH)ALL-AMERICAN

2007 Penn Relays 4/28/07

- 64.36m

2007 SEC Outdoor Championships 5/11/07

- Foul
- Foul
- 60.84m (Three turn throw to get mark!)
- 67.21m (re-grouped in warm-ups – 4 turn throw)
- 69.07m
- Foul

After problems at Penn Relays and SEC re-evaluated technical cues and implements.

- Jake check his training log for the cues we were using in the fall.
- I looked at the implement selection (weigh and length) from the fall training and made adjustments.

We did not change much regarding the implement selection (weigh and length). I changed one throwing session from the plan each week. We focused on the technical cues.

II. TECHNIQUE THROWS AND DRILLS:

A) 5-10 MIN. DRILLS - HAMMER

B) HAMMER: 5 X 4T(1/2 WIRE 30#/25#); 5 X 4T(3/4 WIRE 20#);
5 X 4T(18#); 5 X 4T(16#); 5 X 4T(14#)

II. TECHNIQUE THROWS AND DRILLS:

A) 5-10 MIN. DRILLS - HAMMER

B) HAMMER: 5 X 4T/5T(1/2 WIRE 30#/25#); 5 X 4T/5T(3/4 WIRE 20#);

2007 Technical Evaluation:

Problems:

- Continue to work on problems from 2006
- Re-evaluate transition from indoor to outdoor and from weight to hammer.

Correction Cues :

- Continue with same correction cues.
- Re-evaluate implement selection (weigh and length) and special strength.

2008 PERFORMANCES:

Jake Dunkleberger

Weight:

21.87i		1 McCravy	Lexington KY	2/1/08
21.61i		1 Classic	Ames IA	2/15/08
21.75i		1 SEC	Fayetteville AR	3/1/08
22.24i	SB	2 NCAA	Fayetteville AR	3/15/08

Hammer:

71.42		1 Tiger Classic	Auburn AL	4/4/08
68.70		2 Tiger Inv	Baton Rouge LA	4/12/08
70.20		2 DrakeR	Des Moines IA	4/26/08
70.27		2 SEC	Auburn AL	5/16/08
67.81		2 Mideast	Fayetteville AR	5/31/08
68.17		2q NCAA	Des Moines IA	6/11/08
72.98	PB	2 NCAA	Des Moines IA	6/13/08
69.51		7q NC	Eugene OR	6/30/08
68.90		8 NC	Eugene OR	7/4/08

Jake Dunkleberger
2007-2008 Marco Planner

Phase:	Sub-Phase	Meso:	Micro:	Date:	Competitions:	Results:			
GPP I	GENERAL	1	1	3-Sep -9					
			2	10-Sep -16					
			3	17-Sep -23					
			4	24-Sep -30					
SPP I	SPECIAL I	2	5	1-Oct -7					
			6	8-Oct -14					
			7	15-Oct -21					
			8	22-Oct -28					
		3	9	29-Oct -4					
			10	5-Nov -11					
			11	12-Nov -18					
			12	19-Nov -25	Thksgiv'g Brk				
	4	13	26-Nov -2						
		14	3-Dec -9	Final Exams					
		15	10-Dec -16	Final Exams					
		16	17-Dec -23	Xmas Break					
COMPETITION	PRE-COMP I	5	17	24-Dec -30	Xmas Break				
			18	31-Dec -6	Xmas Break				
			19	7-Jan -13					
			20	14-Jan -20					
	COMP I	6	21	21-Jan -27					
			22	28-Jan -3	Rod McCravy Invite	WT 21.87M(1); SP 16.60M(11)			
			23	4-Feb -10					
		7	24	11-Feb -17	ISU Classic	WT 21.61M(1); SP 15.97M(24)			
			25	18-Feb -24					
			26	25-Feb -2	SEC Indoor	WT 21.75M(1); SP 17.39M(6)			
TRANS. SPP II	Active Rest	8	27	3-Mar -9					
			28	10-Mar -16	NCAA Indoor	WT 22.24M(2)			
	SPECIAL II		29	17-Mar -23					
			30	24-Mar -30					
			31	31-Mar -6	Tiger Classic	HT 71.42M(1)			
			32	7-Apr -13	LSU Invite	HT 68.70M(2)			
			33	14-Apr -20					
			COMPETITION	COMP II	9	34	21-Apr -27	Drake Relays	HT 70.20M(2)
						35	28-Apr -4		
						36	5-May -11		
10	37	12-May -18			SEC Outdoor	HT 70.27M(2); SP NM			
	38	19-May -25							
	39	26-May -1			NCAA Regional	Q HT 67.81M(2)			
11	40	2-Jun -8							
	41	9-Jun -15		NCAA Nationals	HT 68.17M(2q); F HT 72.98M(2)				
	42	16-Jun -22							
	43	23-Jun -29		USA Olympic Trials	Q HT 69.51M(7q)				
TRANS. SPP II	Active Rest	AR	44	30-Jun -6	USA Olympic Trials	F HT 68.90M(8)			
			45	7-Jul -13					
			46	14-Jul -20					
			47	21-Jul -27					

2008 Training Evaluation:

- Did NOT throw weight one day per week out of 4 hammer days per week in fall.
- Did NOT start throwing weight until 1/7/08.
- Threw weight with 40-60 cm length and used ½ wire implements in training.
- First competition 2/2/08. Started competition later and only had a competition every two weeks.
- Much better transition to hammer.

2008

MESO 7; WEEK 25

DAY #2

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: 6 X 3-4T (45# WT.); 6 X 4T(40# WT)

6 X 4T(35# WT); 6 X 4T(30# WT) W/ 50-60CM WIRE

DAY #3

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: 35# X 5; 32.5# X 5; 30# X 5 ALL W/4T W/ 40-50CM WIRE

B) 5 X WIND & RELEASE W/ 45#; 5 X 2T & RELEASE W/ 45#

DAY #5

II. TECHNIQUE THROWS AND DRILLS:

A) WEIGHT: 37.5# X 3; 35# X 4; 32.5# X 4; 30# X 4 ALL W/4T W/ ??CM WIRE

NO COMPETITION

Questions and Discussion.

Thank you!