

## Hurley Maintenance

Most of U.S. Hurling and Supply Co.'s staff had the opportunity to check out the showroom at Torpey Hurleys last summer while visiting Ireland with a collection of hurlers from a few clubs. Sean Torpey—hurley maker, furniture-making-degree-holder, and all-around timber tinkerer—was engaging in a fascinating demonstration and Q&A when one of the attending players brought up the subject of hurley care and maintenance.

After asking the expert-in-the-room's advice, the player qualified his question: his own maintenance efforts include prolonged submergence of his stick in the bathtub. Sean Torpey visibly recoiled from the invisible hurley that seemed to have just smacked his face. Before the craftsman could form a retort regarding how much time he spends trying to decrease the moisture content of the once-green wood, the player continued to specify the frequency of submergence: once per week.



("Is U.S. Hurling & Supply Co. pro interrobang!?" Yes, yes we are.)

Of all the knowledge that gets passed between U.S. hurlers, stick maintenance always seems to be one of the most anecdotal. To support this statement and provide some full disclosure, the author will admit that many of his care efforts have been less than ideal since he held his first stick in 2011:

- Years 1-3: IT PUTS THE LINSEED OIL ON ITS STICK OR IT GETS THE HOSE AGAIN (yeah... I put TONS of linseed oil on my first sticks... they were pretty tacky)

- Years 4-6: Soak the sticks in water for 1 hour at the start of every year before applying a very light coating of linseed oil.
- Years 7+: Store in a cool, dry place.

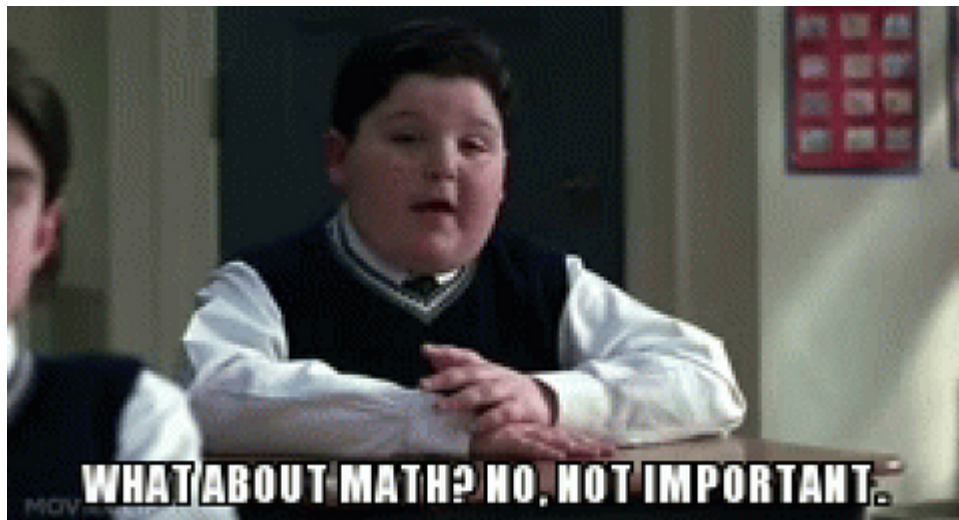
It took me 7 years to get it right.

\*The author had also briefly experimented with the 'leave it in a bucket of water' method out of sheer curiosity; the only thing those efforts maintained were swelling, mold, and mildew—cultivated it, even!

\*\*When we talk about 'stick maintenance', we're almost exclusively talking about ash sticks. Composite sticks are known for having far less stringent maintenance needs—it's the primary reason hurlers in hot and dry climates use them with a much higher frequency than other areas—but we've included a composite maintenance checklist below.

Now bear with me here, but:

Hurling sticks=Ash; Ash=Wood; the two things that (negatively) affect wood the most are moisture and temperature; therefore, drastic fluctuations or attempts to artificially affect such are bad.



If you don't agree, see what happens when you go set a mug of hot coffee or an ice-cold glass of water directly onto your grandparents' wood tables without a coaster.

## Moisture Content & Temperature

According to Sean Torpey, any given stick's moisture content should fall around the 10% mark for optimum performance. Rest safe knowing that at U.S. Hurling, we test all of our sticks to ensure they fall between 8-12% when they arrive and before they leave the shop—that's what those prong marks are for.

To preserve this moisture content, we ardently advocate that your sticks are kept in the coolest, driest place you have available. Basements are ideal; the author hangs his personal stick stock from some nails quickly tapped into the first floor's beams. Those no-mark hooks and wall hangers made by 3M and other companies would likely work just as well.

The absolute worst thing you can do to your ash sticks would be to subject them to high heat. This mostly happens when sticks are tossed into a car and forgotten, left to bake. Unfortunately, people usually care more about human kids and pets, so it's probably a lot harder to explain that you only broke your teammate's car window because you could see a stick suffering in the sweltering summer sizzle.

The bottom line is that excess or drastic fluctuations in moisture and heat affect the stick's durability more than any other factors. Visible signs of wear and stress from storage conditions include rough, dried-out areas (particularly around the bas' perimeter) and severe bending or warping.

Keep your sticks in a cool, dry place and they'll keep you happy with their performance.

## Minor Maintenance & Personal Preferences



<http://www.hoganstand.com/Article/Index/291380?county=National>

### Break-In Period

Ever taken a stick right onto the field and watched it immediately break?

The author can immediately recall two such instances happening in his own playing career. The best way to avoid this is to grab a wall ball or worn out sliotar and make sure you get a decent number of wall ball hours in for a couple weeks. Your wood needs to get used to the average compression and stress on the bas from each strike.

**NEVER USE A BRAND-NEW SLIOTAR FOR BREAK-IN.**

The sliotars' updated PU composition under the leather is decidedly different from traditional cork cores to be more durable (particularly when wet), and, thus, is harder and more likely to break new sticks. Don't let overeagerness destroy your glorious new stick; you may as well go hit rocks.

### Electrical Tape

People seem to love electrical tape on the neck of their sticks, just below the bas. I've heard people talk about how they use electrical tape as grip for your off-hand in the ready position or support when lifting or during a two-handed solo. I've also heard

coaches and new players refer to it as visual assistance for learning hand placements on the stick in the just-mentioned scenarios.

The third reason I've come across is that it provides structural integrity during any 'clash of the ash' between two sticks (e.g. blocking). While we have not run any sophisticated studies regarding the effect of tape vs. bare wood, the U.S. Hurling staff can state that, of the sticks we repair, the split typically does not travel as far down on those with electrical tape.

(Yes, yes, I know I was talking trash about anecdotal evidence only a few paragraphs ago... like everything else we do at U.S. Hurling & Supply Co., when we have conclusive data, we'll share it)

For more on stick repair, check out Kevin's video: [Part I](#) [Part II](#)

## Linseed Oil

A light application of linseed oil can provide some external protection for the wood and help with moisture retention. All of the Maher sticks sold by U.S. Hurling have been given a very light coating of linseed oil by their maker prior to cross-pond shipments to our shop.

THERE ARE SOME IMPORTANT CAVEATS HERE THOUGH:

- Too many coats or too thick a coat of linseed oil will cause it to sort of gum up on your stick and stay very tacky; it can also get all over everything else.



- Natural linseed oil takes forever to dry, whereas boiled linseed oil contains tons of additives and solvents to help speed up dry time 'as if it was boiled' (the 'boiled linseed oil' is not actually boiled itself).

When using boiled linseed oil as a simple, protective finish (e.g. furniture, floors, gunstocks), these additives and solvents probably don't matter too much; when your stick comes under repeated beatings and stress, anything potentially affecting the wood's performance or that may be known by the state of California to cause cancer is important to be aware of—like manganese and cobalt drying agents.

**SAFETY DATA SHEET**  
**Klean-Strip Boiled Linseed Oil**

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Revision: 02/11/2019  
Supersedes Revision: 04/16/2015

<b>15. REGULATORY INFORMATION</b>				
<b>EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists</b>				
<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>S. 302 (EHS)</b>	<b>S. 304 RQ</b>	<b>S. 313 (TRI)</b>
68553-15-1	Linseed oil, cobalt manganese salt {Linseed oil, manganese and cobalt driers}	No	No	Yes-Cat. N096,
<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>Canadian NPRI</b>	<b>Canadian IDL</b>	<b>Canadian DSL</b>
68553-15-1	Linseed oil, cobalt manganese salt {Linseed oil, manganese and cobalt driers}	Yes - Cat.	Yes - Cat.	
<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>Other US EPA or State Lists</b>		
68553-15-1	Linseed oil, cobalt manganese salt {Linseed oil, manganese and cobalt driers}	CAA HAP,ODC: Yes - Cat. TSCA: Inventory: Active		
<b>CAS #</b>	<b>Hazardous Components (Chemical Name)</b>	<b>International Regulatory Lists</b>		
68553-15-1	Linseed oil, cobalt manganese salt {Linseed oil, manganese and cobalt driers}			

[http://www.kleanstrip.com/uploads/documents/Klean\\_Strip\\_Boiled\\_Linseed\\_Oil\\_2-11-2019.pdf](http://www.kleanstrip.com/uploads/documents/Klean_Strip_Boiled_Linseed_Oil_2-11-2019.pdf)

- As linseed oil dries, it hardens and can inhibit the flexibility your stick needs to perform effectively. We only ever see it in the occasional still-frame, but your stick should be able to flex to the extreme, like so:



Photograph: Tony Grehan/Press 22

(DISCLAIMER: if you like to test the extent of your brand-new sticks' flex against the ground and it snaps, that's on you.)

- SPONTANEOUS COMBUSTION! Ah, the favorite linseed oil disclaimer.

Particularly applicable to boiled linseed oil because of the speed-drying additives. Simply put, linseed oil heats as it dries. If you wash out your rags and lay them flat, you should be fine. This is a problem if, for example, you throw the balled-up rags into the bottom of an industrial trash bin that also contains the sticks you just oiled like the author once did in a momentary loss of thought that ignored 15+ years of childhood woodworking experience.



(Once again, apologies to the residents of UConn's Hilltop Apartments and the school's fire department for the 4:30 AM alarm, burnt rubber smell, and room filled with smoke in 2014; on the other hand, getting a substance officially banned from a university's grounds is still kind of a personal achievement... so...win?)

## Composite Stick Maintenance

Composite stick maintenance more resembles giving your equipment a check-up to ensure it is functioning properly and doesn't show signs of serious wear and degradation. Think of composite maintenance as checking to ensure your vehicle's differentials have the appropriate amount of fluid or changing out your smoke detector batteries. It's a simple and fast check to make sure your equipment doesn't fail on the field mid-match where you need it most.

Composite stick maintenance follows 3 general tests:

- **Eye Test:** Is your stick cracked or visibly degrading on the surface? Some composite sticks can start to show spreading cracks that exacerbate into full-on holes in your stick (most common in the bas' heel area due to groundstriking, blocks, and sideline cuts).
- **Ear Test:** Does your stick sound like a maraca?
- **Comparison Test:** My U.S. Hurling Co-Founder, colleague, and alliteration aficionado, Alex, coined the term 'composite creep' to describe how hollow composite sticks slowly degrade in overall performance (primarily affecting touch, 'sweet spot' size, and striking accuracy).



Because this degradation happens slowly and internally (see maracas above), you may not realize that your stick is increasingly short-changing your playing performance. The only way to test for 'composite creep' is to compare the stick in question with a brand-new stick of the same make and model.

\*\*\* Turns out that, in my post-drafting research and fact-checking, 'creep' is a technical term for material degradation and fatigue over time that we glossed over in my English and Economics classes. The technical definition of creep is very applicable to the polymers used in composite sticks, as covered in the linked material sciences text. Eh, if Sir Isaac Newton and Gottfried Leibniz can both get there...

## Description

Creep is the tendency of materials to deform when subjected to long-term stress, particularly when exposed to heat. Fatigue phenomena occur when a material is subjected to cyclic loading, causing damage which may progress to failure. Both are critical factors in the long-term performance and reliability of materials such as polymer matrix composites which are often exposed to these types of stress in civil engineering and other applications. This important book reviews the latest research in modelling and predicting creep and fatigue in polymer matrix composites.

The first part of the book reviews the modelling of viscoelastic and viscoplastic behaviour as a way of predicting performance and service life. Part two discusses techniques for modelling creep rupture and failure. The final part of the book discusses ways of testing and predicting long-term creep and fatigue in polymer matrix composites. [View more >](#)

<https://www.elsevier.com/books/creep-and-fatigue-in-polymer-matrix-composites/guedes/978-1-84569-656-6>

Aside from the above tests, the Reynolds Hurley offers a unique composite maintenance measure: the material can be sanded to remove any nicks, chips, or chucks sustained in the course of duty.

A composite-related note on ash stick maintenance: Any time you are on a rough surface playing, practicing, or just getting in some wall drills - use a composite stick. Going for that sweet one-timer groundstrike is a lot less cool when your stick comes back up looking like it's been hit with a floor sander using 20 grit or straight up explodes on contact.



Credit: Uptown Floors

Hopefully, this article has provided you with the information to prepare your Hurley maintenance efforts. As the author's mom always says (to occasionally deaf ears):

"Proper preparation prevents piss-poor performance."

In the end, Hurley maintenance is no different than bas shape preference: it's up to you.

(However, the results of that maintenance are up to the laws of nature, physics, and chemistry.)