Novelo, Lilia

From:

cityclerk

Subject:

FW: Opposition to the expanded use of the archery range in the Arroyo

From: <JurEcon@aol.com>

Date: January 29, 2015 at 7:45:27 PM PST

To: < smadison@cityofpasadena.net>, < mbeck@cityofpasadena.net>,

bbogaard@cityofpasadena.net>

Subject: Opposition to the expanded use of the archery range in the Arroyo

Gentlemen:

I pray that you will stop the proposed expanded use of the archery range. My husband and I are homeowners whose private property serves as a backstop for the archery shooting range.

The shooting range is dangerous to us, our family and young grandchildren, as well as our visitors. Stray arrows, especially military style arrows, can reach us and injure or kill us. As it is, we are forced to limit our use of our land closest to the shooting range. This is very unfair to us.

Furthermore, we are informed that it is dangerous to walk in the Arroyo, a PUBLIC site, on its hiking trails because of the shooting range. We are afraid to use these public trails because of this particular archery range with its military-style weaponry.

There must be another safer location for the archers than a residential area and a public park. It is not fair to the residents and to the public to be denied a general safe access to public land. *Multi-use* should not foreclose public use for safety reasons. *Multi-use* should not entail danger and risk to nearby homeowners.

I regret that I cannot be there in person to make these objections.

Sincerely,

E J Arnault

From: Steve Bass <stevebass@earthlink.net>
Sent: Monday, February 02, 2015 8:50 AM

To: City_Council; Jomsky, Mark
Cc: city_letters@rovingarchers.com
Subject: Leave the Archery Range alone

We've been active Arroyo users for the last decade and we are not archers.

We walk out dogs in the Arroyo near the archery range three times a week and we bird the area every weekend.

The archers have never been an interference or danger.

I strongly encourage to allow the archers to continue using the area as they have for many years.

Steve Bass Pasadena, California

Novelo, Lilia

From:

cityclerk

Subject:

FW: Use of Lower Arroyo

----Original Message-----

From: Heather Blair [mailto:hblair2@charter.net]

Sent: Friday, January 30, 2015 12:37 PM

To: Bogaard, Bill; Jomsky, Mark Subject: Use of Lower Arroyo

January 30, 2015

Dear Mayor Bogard and Mr. Jomsky:

I am writing you to ask that you give serious thought to the matter of allowing nearly one half of the Lower Arroyo for the exclusive use of the Pasadena Roving Archers. As I hope you are aware, the Arroyo is designated as a "nature preservation area." Giving over one side of the Lower Arroyo to a private club is in breach of this designation and could set a presidence for future mis-use of Pasadena's open areas.

I have been a resident of Pasadena all my life and enjoy walking in the Arroyo on a weekly basis. The archery area was a controversial decision from the start. Allowing a mix-use of both walkers/runners and archery is a receipe for disaster. Suggestions have been made to limit the days and hours, lock targets, and improve signage. These are welcome suggestions but the viability of enforcing them is unrealistic. There are already a number of signs and barriers, more we don't need. Again, an archery range and all the targets, signage, and barriers are a form of man-made litter and should NOT be the focus of a "nature preservation area".

It has been suggested, and I whole-heartedly agree that a new site for the Archery Range be made on the former police shooting range in Eaton Canyon.

By allowing the continued use of the Lower Arroyo for a target range it is only a matter of time before someone will be hit by an arrow. Please do not allow this to happen.

Sincerely,

Heather Blair

From: cityclerk

Subject: FW: Don't take away the range

From: cantoro2000 < <u>cantoro2000@hotmail.com</u>>

Date: February 1, 2015, 2:15:44 PM PST To: <<u>city_council@cityofpasadena.net</u>> Subject: Don't take away the range

Hi, my name is Enrique Bechet, I live in Duarte, but I go with my children to this pleasant please. Since my work schedule varies from week to week, I use to go to the range during weekdays. Please don't make changes, the range is unique. Don't take it away. Enrique Bechet

Sent from my Boost Mobile phone.

Jomsky, Mark

From: Lewis Chiang <chiangl@uci.edu>
Sent: Lewis Chiang <chiangl@uci.edu>
Thursday, January 29, 2015 7:24 PM

To: City_Council

Cc: Jomsky, Mark; city_letters@rovingarchers.com

Subject: Lower Arroyo Archery Range

Hello,

I would like to express my support for the preservation of the Lower Arroyo Archery Range. I have been involved in archery for over 15 years and have travelled to many archery ranges from Los Angeles to San Diego. The Lower Arroyo Archery Range is the most historic range in Southern California and taking it away would be a disservice to the Pasadena community and to the sport of archery in general. Families have been enjoying archery there for decades and seeing it close down would be disheartening. Contrary to some peoples' opinion, it is a safe sport (which studies will show) and I have never seen any injury occur at an archery range or event. There is no valid reason to shut down this archery range and it would be a shame to do so because of a vocal minority.

The Pasadena Roving Archers are a great group of people and the time that they spend maintaining the range and providing inexpensive archery instructions to the community should be commended. The fact that they spend virtually every Saturday morning there giving instructions to beginning archers is astounding and should tell you how dedicated they are to the sport of archery and to the Pasadena community. As well, the large amounts of people who show up for instructions should also tell you how much the community values them and the range.

I hope that the Pasadena City Council acknowledges the research done by the Pasadena Roving Archers showing that the archery range is a safe, enjoyable, and, most importantly, historical part of Pasadena. Archery is a great sport with a tradition not matched by many others and having a beautiful range within the city makes Pasadena unique among its neighbors.

Please include this email in the agenda packet for the meeting involving the vote of the archery range.

Lewis Chiang Programming Manager UC Irvine Registrar's Office (949) 824-7181

Novelo, Lilia

From:

citvclerk

Subject:

FW: Please preserve the archery range at Lower Arroyo Park

----Original Message-----

From: Jason Conner [mailto:jason.conner@cox.net]

Sent: Thursday, January 29, 2015 7:18 PM

To: City_Council Cc: 'Aaron Kiely'

Subject: Please preserve the archery range at Lower Arroyo Park

Pasadena City Council,

It has come to my attention that you will be considering an agreement regarding the historic Lower Arroyo Archery Range on February 2. I got my start in archery over 30 years ago via the free archery lessons there on Saturday mornings. Today, I am a USA Archery Coach and work with several archery groups, including OC Parks Mile Square Regional Park, the Wounded Warrior Battalion West archery team aboard Marine Corps Base Camp Pendleton, and the archery program at the Long Beach VA Hospital, as well as numerous archery clubs and youth scouting groups over the years. Pasadena Roving Archers is a great club, carrying on the fine tradition of archery. I owe my participation in this wonderful sport to them and that beautiful archery range you so generously support. Archery is good wholesome family fun and a terrific sport that can be practiced by young and old, big and small, fit and disabled. Archery is a vibrant and growing sport. The City of Pasadena should be proud to help support such a fine tradition. Please preserve the archery range!

Very respectfully,

Jason Conner 30 Westport Irvine, CA 92620

From: cityclerk

Subject: FW: Lower Arroyo Archery Range

----Original Message---

From: Craig Newhouse [mailto:arjuna2616@aol.com]

Sent: Sunday, February 01, 2015 3:33 AM

To: City_Council

Cc: Jomsky, Mark; city letters@rovingarchers.com

Subject: Lower Arroyo Archery Range

To The City Council of the City of Pasadena,

I am writing to voice my unqualified support for the Lower Arroyo Archery Range or Pasadena Roving Archery Range (PRA). I have written before and attended both City Council and Pasadena Parks and Recreation meetings regarding the renewal of the conditional use permit that governs the PRA.

The PRA is a unique and historical regional resource for the archery community. It is the only roving archery range north of San Diego County. I am a President Emeritus of The Woodley Park Archers in Van Nuys and recognize how unique and precious your venerable roving archery range is. Some version of the present Roving Archery Range has been at the site for 80 years, with historic evidence pointing to their being some form of archery range at the site since the mid 1880's. One of my personal heroes, traditional archery god Howard Hill was the archery pro at the Lower Arroyo Archery Range during his time living in Southern California, while he was working in Hollywood movies. Incidental scenes from the 1938 classic film "The Adventures of Robin Hood" (Errol Flynn, Basil Rathbone) were filmed on the range because Howard Hill was archery master on the film.

During a previous City Council Meeting that I attended Mayor Bill Bogaard stated the concept that previous precedent of public land use is not to a reliable guide for future public land use. This is one of the few times that I have heard a lawyer argue against precedence and I find the reasoning highly suspicious. Given that the PRA has an unblemished safety record, is home to members of the U.S. Olympic Archery community and continues to give valuable archery training to thousands of children and adults each and every year, I would think that the City of Pasadena would be proud of the range and the work of the Pasadena Roving Archers.

However, this seems not to be the case. The last time that I attended a Pasadena City Council meeting to support the PRA, I the entire large assembled group of supporters was required to wait past 12:30 a.m. before the Council took-up the issue of renewal of the Range's conditional use permit. The Mayor and Councilman Madison repeatedly circled back to the idea that there could be "split use" of the area at different times or days, which shows a willful disregard for the realities of Archery Range Safety at a public archery range. The Council should be aware that range safety is of the utmost concern to all archers, that our wish is never to harm anyone. The fact that no one willfully crossing, even running across the archery lanes, that no off-leash dog has been hurt is a solid testament to local archer's commitment to range safety.

I recognize that with an increasingly dense population that there are new pressures for use of this land. However, the plan put forward by the Parks and Recreation department represents a very workable compromise that I can support. Removal of the "inner trail", a more solid separation of the range by planters from the pedestrian trail adjacent to the Arroyo and effective signage designating range entrances are common sense solutions. The compromise is that the PRA will vacate the targets in the "Northern Range". This seems to have been the plan now for well over a year now, but the Pasadena City Council has found every excuse to kick the can down the road on this subject. I would hope that the Pasadena City Council approves the plan and the renewal of the conditional use permit governing the Lower Arroyo Archery Range.

Craig Newhouse
President Emeritus, Woodley Park Archers <u>arjuna2616@aol.com</u>
(818) 681-3231

From:

cityclerk

Subject:

FW: In support of Pasadena Roving Archers

From: Toni Devereaux [mailto:toni devereaux@yahoo.com]

Sent: Saturday, January 31, 2015 5:57 PM

To: City_Council

Cc: Jomsky, Mark; <u>city_letters@rovingarchers.com</u> **Subject:** In support of Pasadena Roving Archers

I have been walking in the Arroyo around once a week for the past 25 years. I support the Roving Archers' use of the Arroyo - they do not in any way interfere with my walk and I like seeing the archers practicing their sport and passing it on to the next generation.

I simply don't understand why a private group wants to ban this organization that gives archery lessons to the public, from the small space they have used, part-time, for the past 79 years. I have no interest in football or rock concerts, but I accept that the Rose Bowl, a private for-profit entity, takes up (a lot of) space in the Arroyo to provide a service that only some of the public enjoys. Same with the golf course and the casting pond. Why is this group singling out the tiny archery range and ignoring these giant private enterprises? There's something fishy here.

Antoinette Devereaux

From:

cityclerk

Subject:

FW: Lower Arroyo Archery Range-Severe restrictions on usage by Roving Archers

From: Andrew Ewing [mailto:pete@andrewgewingjr.com]

Sent: Saturday, January 31, 2015 11:57 AM

To: Bogaard, Bill; Jomsky, Mark

Subject: Lower Arroyo Archery Range-Severe restrictions on usage by Roving Archers

I am a resident of Del Mar Blvd., and former President of the West Pasadena Residents' Association. Additionally, I have been very familiar with the archery range since my youth, where I practiced with bows and arrows.

I encourage the City to take aggressive action to radically reduce and aggressively control current archery activities at the very least. From my days as a boy, this WAS a locally used facility, with equipment that was basic. Now, population growth and equipment advances make this a VERY dangerous and lethal place.

I encourage a relocation of this to an area more appropriate for this activity. If it must be in Pasadena, I am aware of suggestions of the old Police Range in Eaton Canyon(where I am also familiar as a member of the Rotary Rifle Range in my youth), which seems more suited.

Times have changed, LA is a much larger place. Now, rather than going to Eaton Canyon to shoots guns, I drive to Sylmar or Santa Clarita where more appropriate facilities have been built, yet still accessible. I believe an alternate location for the archery activities also could be developed outside of our urban environment.

Pete Ewing 320 West Del Mar Blvd. Pasadena, CA 91105

From:

cityclerk

Subject:

FW: Support Pasadena Roving Archers

From: emcalciano@aol.com [mailto:emcalciano@aol.com]

Sent: Sunday, February 01, 2015 11:54 PM

To: City_Council

Cc: Jomsky, Mark; <u>city_letters@rovingarchers.com</u> **Subject:** Support Pasadena Roving Archers

Dear Mayor and Members of the City Council:

I am writing to request that you support the Pasadena Roving Archers on Monday night. They are a phenomenal organization. What they do is magical. My 8-year old Quinn, who loves the TV show Arrow, wanted to learn archery like his hero. The Roving Archers have been wonderful teachers to him these past few months.

My understanding from our NextDoor Bungalow Heaven website is that there is a group that is requesting that you relocate the Roving Archers. There is a recommendation #4 from staff that appears to reflect that group's influence because it would direct staff to locate another location for weekdays. Please adopt all of the recommendations except #4.

Please do not push the Roving Archers out after nearly a hundred years in the Arroyo. We should be giving them the key to the City, not making them fight for their existence.

This is especially so in this time where there violence and shootings are on the rise. We need to give our youth productive outlets such as the Roving Archers offer. Anyone who can pull themselves out of bed early on a Saturday morning and show up in the Arroyo is taught. To call this a "private club" is misleading because it really is a community organization of generous volunteers. We need this resource now more than ever.

Please be aware that my neighbors and I have been posting on social media (both Facebook and NextDoor) in support of the Roving Archers, and we and all of our friends will be very disappointed if you do not support them.

Finally, for nearly a hundred years Council after Council has carefully protected and nurtured this institution because each Council recognized that the Roving Archers were a jewel in the City's crown. Do you want its destruction to be your legacy? Just as the Red Cars are mourned to this day, the loss of the Roving Archers would not be forgotten.

Please make this letter available to the public pursuant to the Brown Act. Thank you for your consideration.

Yours,

Elizabeth Fagan 784 N. Mentor Avenue 626-437-3865 February 2, 2015

Mayor Bill Bogaard Pasadena City Council 100 N. Garfield Avenue Pasadena, CA 91109

RE: COUNCIL AGENDA ITEM #13 PROPOSAL FOR LOWER ARROYO ARCHERY RANGE AND DEAL POINTS FOR NEW AGREEMENT WITH PASADENA ROVING ARCHERS

Dear Mayor Bogaard and Members of the City Council,

Pasadena prides itself on protecting and celebrating our history as a community. We have a wealth of historic properties and cultural assets. Archery in the Lower Arroyo dates back to the late 1920s. Its almost 90-year presence in the Lower Arroyo makes archery a historic and cultural use important to the history of this area.

As a life-long Pasadena resident, I encourage you to vote to support archery to remain as an historic use in the Lower Arroyo and provide any necessary quidance for its continued, responsible management.

Sincerely,

Lambert Giessinger

2300 E. Mountain Street

From: cityclerk

Subject: FW: Lower Arroyo Archery Range

----Original Message----

From: Shannon Goods [mailto:goods.shannon@gmail.com]

Sent: Friday, January 30, 2015 9:15 PM

To: City_Council

Cc: Jomsky, Mark; city letters@rovingarchers.com

Subject: Lower Arroyo Archery Range

Dear Members of the City Council:

For years Pasadena has had the honor of being the home of the world's oldest continuously operating field archery range. Generations of children have grown up in this area with the opportunity to learn and practice the sport of archery in their own neighborhood. Now my children are continuing this long-standing tradition, and we would really like to see this opportunity continue for them, and the next generations. When we got involved in archery four years ago, we thought it would just be a passing interest the children would explore before moving on to other interests. Instead, their love for the sport has only grown and developed, in large part due to the amazing volunteers and program offered by the PRA. They have learned a great deal of discipline, responsibility and perseverance through the excellent coaching provided at the public instruction programs offered on Saturday mornings. The instructors are exceptional at working with the kids. Their love for the sport of archery and desire to share that with others clearly shows. It is also amazing how well run the classes are, and all by volunteers! All the safety procedures are clearly explained and thoroughly enforced from the beginning and the entire class runs exceptionally smoothly, without incident. Now my children have progressed to the level of owning their own archery equipment and practicing more times during the week than just on Saturday mornings in order to continue improving. They attended their first PRA sponsored tournament this last weekend and loved the experience. Just as in other sports, they will need the opportunity to practice regularly during the week, and the chance to practice and compete according to the rules of field archery, using the full range of 28 targets. There is nowhere else in the area they could go to do this. And unlike so many of the other activities available for children, archery in the Lower Arroyo is accessible to everyone and can be shared in by a broad age range. We need more opportunities for the children of Pasadena to take part in low-cost activities that develop character and cross age boundaries like archery, not fewer! These kinds of programs, run by such amazing volunteers contribute to building a stronger community and should be supported and encouraged. Pasadena has a proud heritage of supporting a broad range of human endeavors, from the arts, to the sciences, to world-class sporting facilities such as the Rose Bowl. The Lower Arroyo Archery Range is a treasure the city should be proud to claim as its own, ranking just as highly as the Norton Simon and JPL, in its own field. I ask the City Council to please allow this range to continue thriving, as it is in its current status, for my children and the generations to come. Please also include my letter in the agenda packet for the City Council meeting on February 2nd. Protect Pasadena's proud heritage! Thank you! Sincerely,

Shannon Goods

510 Locke Haven Street Pasadena, California 91105

January 31, 2015

Mayor William Bogaard (<u>bbogaard@cityofpasadena.net</u>) Members of the Pasadena City Council (c/o Mark Jomsky) City Clerk Mark Jomsky (jomsky@cityofpasadena.net)

Subject: Limits on Archery Range Usage and Action on Permanent Relocation

As the debate over the use of approximately one half of the Lower Arroyo for the exclusive use of a private club, the Pasadena Roving Archers, comes before the City Council again on Monday, February 2, 2015, we join the many others who ask that a fair and safe plan be established for the location and use of the Archery Range.

It is unacceptable that a private group has control of almost half of the usable open space in the Lower Arroyo. It is even more unacceptable that both neighbors and casual recreational users of the Lower Arroyo are exposed to annoyance and even danger.

As a temporary solution, we ask that you limit the days and hours when the Archery Range is open to weekends only.

As a permanent solution, we urge that you immediately move forward to establish an Olympic-sized Target Range in Eaton Canyon on the site of the former Police Shooting Range. Eaton Canyon offers a safer site with improved visibility, fewer trees and convenient parking.

We hope that you will respond and act affirmatively in the interest of both the Roving Archers and the broader public.

Respectfully submitted,

Ken and Kathy Grobecker, local homeowners & Arroyo users kgrobecker@aol.com

Bcc: Claire Bogaard (cwbogaard@earthlink.net)), Mic Hansen (hansmic@earthlink.net), Linda Zinn (linda.zinn@sothebyshomes.com)

From: cityclerk

Subject: FW: Lower Arroyo Archery Range

From: Patricia Hanes [mailto:patriciahanes@gmail.com]

Sent: Sunday, February 01, 2015 10:11 PM

To: City_Council; Jomsky, Mark; city_letters@rovingarchers.com

Subject: Lower Arroyo Archery Range

To Our Elected Officials:

For inclusion in the Feb. 2, 2015 meeting agenda packet.

Pasadena has a long and important history. Part of that history includes the historic Pasadena Archery Range. This historic range has provided wholesome entertainment to generations of citizens from all over the Los Angeles area, bringing families to the city over and over. Many of our family places are disappearing. Here is one where people of all ages have the opportunity to come out, practice a sport, and just be together.

Please reconsider the decision to close this important area that contributes to the city, both historically and in the future. You'll see my large family there.

Warm Regards,

Patricia (Trish) Hanes, PhD, MSN, MAED, MS-DPEM, RN, CNE

Professor

Past Moderator, Faculty Senate

President, California League for Nursing

National League for Nursing Ambassador

Vice-President, Independent California College and University Faculty Association

Azusa Pacific University School of Nursing Azusa, CA 91702

phanes@apu.edu

Office: 626-815-5052 Secretary: 626-815-5386

From: <<u>CityWeb-Server@cityofpasadena.net</u>> **Date:** February 1, 2015 at 10:49:26 AM PST

To: < mfuller@cityofpasadena.net > Subject: WWW COMMENT

Data from form "Contact Councilmember Margaret McAustin" was received on 2/1/2015 10:49:26 AM.

Send Comments

Field	Value
Your Name	Christopher Heck
Phone	310-210-0670
Email	check@wrslawyers.com
Comments	Dear Margaret, I'm writing to you concerning the upcoming council vote on whether to allow the Pasadena Roving Archers to continue to have archery at the Arroyo Seco Park. Although I am not a member of the Archers myself, I strongly support continuing to allow them to use the park for their club. Having organizations like the Archers being able to use public parks to pursue their hobbies is one of the things that makes Pasadena an interesting and nearly unique place to live in Southern California. By all accounts (and in my own personal observation in taking a class with them) their practices are very safe and the training in archery is top notch. I have never heard of a single incident involving harm either to a person or to a pet from the archers. Therefore, I urge you and your fellow council members to vote to preserve this interesting and unique use of public parks land. Don't allow the Arroyo Seco Park to be turned into yet another gentrified cookie cutter space. Your neighbor, Chris Heck 1408 N. Mar Vista Ave. Pasadena, CA Office dir.: 310-744-6606

Email "WWW COMMENT" originally sent to <u>mfuller@cityofpasadena.net</u> from <u>CityWeb-Server@cityofpasadena.net</u> on 2/1/2015 10:49:26 AM.

Novelo, Lilia

From:

cityclerk

Subject:

FW: lower Arroyo Archery Range

----Original Message-----

From: Brooks Hogan [mailto:bthogan@cox.net] Sent: Friday, January 30, 2015 12:42 PM

To: City Council

Subject: Iower Arroyo Archery Range

I request the preservation of the Lower Arroyo Archery Range. Archery is a great outdoor activity that many people enjoy, and this Pasadena range has successfully and safely operated for many decades. Olympians need to start and become interested somewhere and the Pasadena club does well at archery introduction. Allow us freedom of choice in the activities we wish to pursue, and don't close this established range. I attend their events from Orange County, and sometimes visit your local businesses — in fact Sorriso is my favorite Italian.

Brooks Hogan Tustin, CA

From: cityclerk

Subject: FW: Armory's CIE Program and the Lower Arroyo Archery Range

----Original Message-----

From: Aaron Kiely [mailto:aaronkiely@sbcglobal.net]

Sent: Sunday, February 01, 2015 6:41 PM

To: Scott Ward; Doris Hausmann

Cc: City Council; Jomsky, Mark; Williams, Tina; West, Jana; Cruz, Christian (Field Rep); Morales, Margo; Sullivan, Noreen;

De La Cuba, Vannia

Subject: Armory's CIE Program and the Lower Arroyo Archery Range

Dear Mr. Ward and Ms. Hausmann,

I read your October, 2014 letter to the Pasadena City Council in which you express opposition to "any proposed new restrictions on the public use of land in the Lower Arroyo."

I am disturbed by your letter, and I want to explain why.

As a parent and JPL engineer, I am strongly in favor of improving the quality of science education provided to children. Opportunities like your Children Investigate the Environment (CIE) program are exactly what we need.

I'm also a volunteer archery coach with the Pasadena Roving Archers youth instruction program. I believe that sports like archery also provide tremendous benefits to children and are a valuable complement to academic instruction. On a personal note, my older son has autism. Archery is the only sport in which he participates, and it is one of the few sports where children like him are not treated as "special needs" participants — he simply competes as an equal with his "typical" peers. And so I am concerned that opponents of archery are trying to reduce or eliminate the public's ability to participate in this sport during the week at the only remaining archery range in Pasadena.

I believe that the CIE program and archery already coexist harmoniously in the Lower Arroyo Park — and that there is absolutely nothing in the proposal that would expand the size of the archery range, impose new limitations on public use of the park outside the archery range, or otherwise hinder your laudable efforts.

You mention "new restrictions on the public use of land." But the archery range would continue as a public archery range. The Pasadena Roving Archers would continue their Saturday morning archery classes and Sunday morning archery tournaments — both open to the public for a small fee. At all other times, the range would remain open for public use for archery. The only new restriction on it's use would be imposed on the archers, who would be required to display credentials reflecting the successful completion of an archery safety course. While we may disagree about the relative merits of different potential uses for parkland, designating an area for a specific sport (whether it is a basketball court, tennis court, or archery range) does not make that area a private use.

The archery range would continue at its current size, which has not changed since at least the 1980s, and is consistent with the Lower Arroyo Master Plan adopted by the city in 2003. The city estimates the size of the southern archery range (the only full-time archery range) as 7.5 acres. The additional northern range (roughly 4-5 acres) would continue to be used for archery on only 13 Sundays each year using temporary targets, remaining available for passive recreational use at all other times. To put this in perspective, the city estimates the size of the Lower Arroyo Park at approximately 150 acres.

The proposal would erect natural barriers (such as rocks and trees) to prevent hikers from taking a shortcut through a section of the archery range. This shortcut places hikers in between archers and targets. This shortcut is not part of the

city-designated trails, and measures to discourage its use would seem to be a reasonable safety precaution rather than an "expansion" of the archery range.

I trust that the CIE program does not encourage children to walk across shooting lanes in the archery range, in which case this safety measure does not adversely affect your efforts.

If you are now able to conduct the CIE program successfully under the current arrangement, and the proposal essentially preserves the status quo, why are you opposed?

Sincerely, Aaron Kiely

Jomsky, Mark

From:

Winn Krafton <winnk@sbcglobal.net> Friday, January 30, 2015 5:45 AM

Sent: To:

Jomsky, Mark; Bogaard, Bill

Subject:

I've been an archer, but I agree that

I started shooting in the Arroyo in the 70's but do not currently. It's too much priority give to a specific group. And it's dangerous.

A Solution:

- Limit the days and hours when the Archery Range is open to weekends only.
- Improve signage and use flags to alert pedestrians and others when the Range is open for archery use.
- Targets must be closed and locked when the Range is closed.
- Trained Range officers must be present whenever the Range is open to assure that rules are followed.
- Adopt City staff rules for licensing, training classes and a reasonable fee structure.

OR:

• Establish an Olympic-sized Target Range in Eaton Canyon, **NOW**, on the site of the former Police Shooting Range. Eaton Canyon offers a safer site with improved visibility, fewer trees and convenient parking.

Winifred Krafton

Novelo, Lilia

From:

cityclerk

Subject:

FW: Archery Range in Lower Arroyo

From: Joyce Lee [mailto:joycemay728@gmail.com]

Sent: Thursday, January 29, 2015 7:38 PM

To: Bogaard, Bill **Cc:** Joyce Lee

Subject: Archery Range in Lower Arroyo

To: Mayor Bogaard and City Council Members

I am writing this to protest the exclusive use of a nature preservation area by a private group (Pasadena Roving Archers). The area involved is almost half of the usable open space in the Lower Arroyo. How did this come about and what are the rights of others for use of this space?

Also, if arrows have been found in neighboring private property, is safety an issue? Is it a matter of time before an injury or worse occurs?

I support relocating the Roving Archers to the former Police Shooting Range site in Eaton Canyon.

Sincerely Yours, Joyce Lee 1230 Romney Drive Pasadena, CA 91105

From: cityclerk

Subject: FW: Pasadena Roving Archers

From: Paul Little [mailto:Paul@pasadena-chamber.org]

Sent: Sunday, February 01, 2015 6:28 PM

To: City_Council

Cc: Jomsky, Mark; Beck, Michael **Subject:** Pasadena Roving Archers

This is public comment from the Pasadena Chamber of Commerce regarding the Pasadena Roving Archers that will be considered at Monday's City Council meeting:

Dear Mayor Bogaard and Pasadena City Council Members,

The Pasadena Chamber of Commerce asks the Pasadena City Council to recognize the tremendously positive contribution the Pasadena Roving Archers make to Pasadena, our parks and our citizens.

The Pasadena Chamber supports continued use of the Lower Arroyo by the Pasadena Roving Archers under conditions and restrictions similar their current usage.

In their tenure in the Arroyo, the Pasadena Roving Archers have brought visitors to Pasadena for their tournaments, presented our Arroyo Seco to visitors and introduced archery to hundreds of young people through their classes and open house events.

Further, the Pasadena Roving Archers draw positive attention to Pasadena. While the annual economic impact of the Archers and their events may be minimal for our local businesses, by focusing the attention of participants in their sport toward our city, Pasadena's reputation as a safe, welcoming city for all manner of activities grows.

The Pasadena Roving Archers is a safe, positive user of the Lower Arroyo. The Archers teach responsible use of equipment, require safe practices of their participants and take very good care of the area they utilize.

By teaching responsible practices to young people, the Archers provide an opportunity not found in many places. Young people have a place to learn appropriate and safe use of the bow and arrow. For thousands of young people, the Pasadena Roving Archers provide an opportunity to experience archery, practice technique and develop safe and responsible archery skills.

The impact of the Pasadena Roving Archers on the Lower Arroyo is minimal. The area they have used for generations is separate and distinct. While they do take up space, it is not in any way detrimental to other uses in the area, and does not impinge on anyone's ability to enjoy the area. Walkers can still walk, equestrians can still ride horses and every other user of the area can enjoy it.

The Pasadena Roving Archers, like many other institutions in Pasadena, are clearly deserving of recognition from the City of Pasadena and the City Council. For eighty years, the Archers have used space in the Lower Arroyo to promote archery and utilize the area for positive recreational activity. In doing so, they have

From: cityclerk

Subject: FW: I support our archery range

From: Rebecca Little [mailto:auntbecky@earthlink.net]

Sent: Saturday, January 31, 2015 4:38 PM

To: City_Council **Cc:** Jomsky, Mark

Subject: I support our archery range

Dear Council Members,

Please keep our archery range! We are lucky to have such a beautiful spot in Pasadena and in 79 years, there has never been an accident. Why would you try to get rid of it? I've read the arguments from the Stewards of Public Land and they are faulty.

I would also ask that the mayor recuse himself from this vote since his wife is one of the organizers.

Thank you, Rebecca Little 728 N. Wilson Ave. Pasadena 91104

Mr. Jomsky - please distribute this email to all of the council members and include it in the agenda packet for the meeting. Thank you!

Dear City Council,

Over the past two years there has been a tremendous outpouring of support for preserving the historic Lower Arroyo Public Field Archery Range. Our online petition has gathered more than 3000 supporters representing all 50 states. Hundreds of supportive emails, postcards and letters have been sent to City Council. Many more supporters have expressed their views to us in person at the range or in private meetings.

In the 15 pages attached to this letter, we've organized the overwhelming set of facts and reasons for preserving the range into 15 major theses:

- 1. Archery and the Lower Arroyo range are safe.
- 2. The archery range is a great place for kids.
- 3. The archery range is a great place for families and friends.
- 4. Archery hones physical and mental skills.
- 5. Archery has always been an equal-opportunity sport.
- 6. Archery is popular and the range is used 7 days a week.
- 7. The archery range is a public use, not an exclusive use.
- 8. The archery range isn't expanding or hogging too much space.
- 9. Different activities require their own defined space.
- 10. Field archery belongs in the Lower Arroyo.
- 11. Most archers and non-archers coexist with each other happily.
- 12. Archery and PRA are a great community resource.
- 13. The archery range draws people and business to Pasadena.
- 14. The archery range is an important historic treasure.
- 15. Archery and the range are a big part of Pasadena's cultural history.

These 15 theses summarize tersely a diverse and compelling set of outstanding reasons for preserving the range. The justifications for these 15 theses come from compilations, extracts, and synopses of the thousands of written and verbal comments we've received from our supporters. We urge all of you on the City Council to read and assess the supporting comments and other evidence in favor of each thesis, and then to reflect on how overwhelmingly the 15 theses fortify the case in favor of preserving the archery range from so many different angles.

We are sending separately our response to the specific proposal in the agenda report for the next City Council meeting.

Sincerely, Terri Ashley-MacQuarrie Vice President, Pasadena Roving Archers

1. Archery and the Lower Arroyo range are safe:

Archery at the Lower Arroyo Range is very safe. It's important to assess safety based on facts rather than mistaken perceptions. The fact is that there has never been an archery accident at this range in its entire 80-year history. The National Field Archery Association (NFAA) inspects this range every two years, and has certified it as safe for decades. In fact, this range has served as one of NFAA's models for establishing safety guidelines.

This perfect safety record is not due to some unusual string of luck, this is the norm for archery. Just look at the statistics. National Safety Council statistics indicate that archery is more than three times safer than golf. The insurance industry makes its own assessments of safety risks to set rates. Insurance premiums for archery are about the same as those for golf and badminton, and much higher for more dangerous sports like volleyball and cheerleading. Archery results in somewhat fewer injuries than jogging, and many times fewer injuries than other recreational sports that Pasadena promotes in its City parks, including soccer, softball, tennis, and basketball.

Here's why the sport of archery is so safe: Some people just don't believe the mounds of statistics that prove how safe archery is compared to other sports. How can archery be safer than more familiar everyday sports such as golf or softball? This question has a simple technical answer: Archers propel their projectiles (arrows) with much greater accuracy than other sportsmen such as golfers or softball players. Errant arrows don't endanger other people because they don't deviate very far from their targets. The result is that archers hardly ever pose a threat to themselves, to other archers, or to nearby onlookers or passers-by. This is the technical reason that explains why archery is so safe compared to most other sports.

The current proposal will help the range to continue its perfect safety record by incorporating range rules into municipal code so that they can be enforced, requiring successful completion of an archery safety course, and eliminating the "unofficial path" that crosses shooting lanes. The 2011 Pasadena Police Department report calls for the elimination of walking through the range and the construction of natural barriers to prevent this dangerous practice. So does the Lower Arroyo Master Plan (LAMP).

2. The archery range is a great place for kids:

Kids love archery. There's something almost primal about it, a visceral reaction. Put a bow in the hands of a three-year-old, and he/she will immediately pull the string back and take aim. This makes sense, since the bow and arrow is one of humankind's earliest inventions and is found in practically every culture that ever existed anywhere on Earth.

Archery provides emotional benefits, especially for kids. Archery can be an outlet for emotions, both positive and negative, providing children a safe place to express their feelings. Striking the target is enormously satisfying, and missing teaches her to handle frustration and disappointment, followed by triumph as accuracy improves. Archery appeals to quiet and withdrawn kids. It gives them an excuse to hang out with similarly inclined kids. As they build confidence through their growing ability, they come out of their shells and form close bonds with their friends on the team. Coaches provide additional adult role models and mentors.

Archery provides many social benefits for kids. Archery is a social activity, as archers usually practice and compete together. Whether practicing, competing or shooting for fun, a child is learning respect for others (teammates, competitors, coaches, judges), as well as the importance of following rules. He learns to care for and respect his equipment and to cooperate with his fellow archers and instructors.

Archery even aids a child's mental development. A recent study at the University of Pennsylvania found that self-discipline is the best predictor of a child's academic performance. Excelling in archery requires immense concentration, patience, and a highly developed sense of self-control. Focusing on the target teaches the child to clear her mind and aim precisely. These same skills will help her to deal with stress and clear her mind of worry and will enable her to remain more focused on tasks away from the archery range. Archery is particularly helpful for children with concentration problems and conditions such as ADD or ADHD.

Archery at the range is a great low-cost program for youth. Youth today should focus and be encouraged in positive activities in the community. Most children who take the PRA's classes absolutely love it and enjoy it. This program is safe and is a great low-cost program that provides a wonderful opportunity for youth in our community. It increases self-esteem and knowledge of the world around them.

The sheer joy and unbridled enthusiasm of the kids taking archery classes is truly something to behold and appreciate. This deserves to be nourished and promoted, not stamped out cruelly for petty political reasons.

3. The archery range is a great place for families and friends:

The Lower Arroyo Park is a great place for family togetherness. Having the archery range alongside the walking trails and other park facilities promotes family togetherness even when members of the family don't like the same activities. Mom can jog nearby while her daughter practices archery and dad tries his luck at the casting pond. The Lower Arroyo Park has something for everyone, and the archery range is an important part.

The Field Archery Range is a place where whole families can go together and keep returning to. With movies like Brave, The Avengers, and Hunger Games, a lot of kids want to try archery. During unreserved periods, parents and their children can shoot for fun at one target while not interfering with more competitive archers practicing in a different shooting lane. This would not be possible on a target archery range, which requires regimented synchronization of shooting at all targets and discourages simultaneous utilization by archers of significantly different abilities.

Taking the PRA classes at the range is an amazing family experience, especially for the children. It would be a huge loss to the city, as well as individual families, if this beautiful, historic archery range were closed or reduced in size. The city of Pasadena should be celebrating the fact that they have such an important and unique site, not trying to get rid of it!

Archery is a wonderful bonding activity for families and friends. It's a safe, fun, empowering sport. It teaches focus, patience, discipline, and the rewards to be gained from sustained effort toward a goal. The Pasadena archery range is a wonderful place where thousands of people have learned to shoot and formed friendships.

Family togetherness on the range goes back more than half a century. A 1958 article "Family Groups Take to Archery" in The (Pasadena) Independent Star-News announced that "A new facet to archery … will be revealed today when local archers inaugurate 'family Sunday' at the Arroyo field archery range … Family groups are urged to bring picnic lunches and make a day of it at the archery range." The news article included photos of family groups having fun at the range. People in Pasadena 56 years ago knew that the range was a great place for families. Why not now?

4. Archery hones physical and mental skills:

Archery helps to develop balance and hand-eye coordination. It teaches discipline, patience and balance. Balance is vital to success in archery, as the student has to hold the body still while aiming and making a shot. Practicing archery helps them to gain control over their balance as they focus on trying to hit the targets. Hand-eye coordination is an essential skill for archery. Archery trains the hands to work together while performing different tasks, aiming and firing arrows based on input from the eyes. With practice, coordination improves, and this results in better aiming of the bow. This training in archery will help the student in other sports and activities that also require hand-eye coordination.

Archery provides significant physical conditioning with very low risk of injury. While not overtly physical, archery requires body awareness and strength in the upper body. Drawing a bowstring works the muscles of both arms as well as the chest, shoulders and back. Similar to lifting weights, this position is typically maintained for several seconds before the archer releases the string to fire an arrow. With repetition, the stress of drawing and firing a bow leads to muscle development in most of the major muscle groups of the upper body.

Archery is a time-honored skill of concentration and precision. We need to instill this wonderful sport in our youth. Pasadena's Arroyo must stay open to all interests. Archery is a sport like golf that requires its own safe area separated from other activities. Please keep the range fully open for archery, and the other areas open for other recreational interests.

5. Archery has always been an equal-opportunity sport:

Archery isn't just for the wealthy any more. More than a century ago, archery could be practiced and enjoyed in the backyards of Pasadena's landed gentry. It became accessible to people of all income classes when an enlightened city government opened the sport to the public by permitting archery to take root in the Lower Arroyo in the 1920s and 1930s. Progressive city policy has enabled the public to practice archery in the Lower Arroyo for nearly a century. Archery in Pasadena should remain open to all, not just to Pasadena's wealthiest citizens.

Archery is for all races, ages and genders. PRA has never been a segregated club, even long ago when many of Pasadena's institutions were. As far back as the 1890s in Pasadena, archery was a sport enjoyed by boys and girls, men and women. Archery has always been a sport of equal opportunity for all ages and both genders, long before Title IX and other legislation mandated such equal opportunities in other sports. Please continue to support this equal-opportunity sport.

Archery is very affordable. Entry-level equipment is not prohibitively expensive; youth bows can be bought for under \$100. Many archery clubs and ranges offer beginner lessons at low cost, including the use of equipment. For archers desiring to compete, a basic setup will cost \$200-300, but archery gear lasts a very long time and holds a great deal of its resale value. Additionally, competitive bows feature replaceable limbs, so that as the student's strength and size increase, the bow can grow with her at considerably less than the cost of a whole new bow.

Archery is accessible to handicapped and elderly citizens. The sport is practiced by people ages 3 to 100, including those with a broad range of disabilities. It doesn't require big muscles or above average athleticism. There are blind archers and archers without arms, archers with cerebral palsy and brittle bone disease and hemophilia. For many people with disabilities, archery is the only sport in which they will ever compete. And it's truly amazing that many of them can compete against able-bodied people as equals.

"As a Pediatrician who works with special needs children, I have personally witnessed the transforming power of a sport like archery in my patient population. I have several young patients who belong to the Pasadena Roving Archers. The focus and concentration necessary in this sport provides these children — who often have limitation in this area — a fun and non-academic means of practicing these skills. The opportunity to socialize with other neurotypical children while participating in a structured activity is enormously helpful to children with special needs. For some children with physical challenges, archery provides them with their only opportunity to participate in a sport. Finally, the opportunity to compete on an equal playing field with other children bolsters self-esteem." — Diane Danis, M.D., M.P.H.

"I'm a competitive archer and love the Pasadena range. Archery is an amazing sport that requires discipline and focus. As a disabled athlete it provided a way for me to get back into sport that was safe for my body. Please don't take this away from the public! The only 'close' quality public archery range is all the way in Oak Park (Ventura) and many can't drive that far."

- Kaitlin Kelly, Pasadena

6. Archery is popular and the range is used 7 days a week:

The sport of archery is experiencing burgeoning popularity. Archery classes offered by the Pasadena Roving Archers are so popular that they are routinely filled to capacity. USA Archery (USAA) membership trends show that archery's increasing popularity is particularly strong among youth (121% USAA membership increase over the past 2 years) and women (105% increase over the past 12 months). In light of archery's surging popularity, it would be nonsensical to shrink the range or reduce the hours during which Pasadena's only archery range is available to the public!

Archery as a sport has become more and more popular recently because of movies portraying it. Having an invaluable and amazing resource like the range in Pasadena open to the public for instruction and safe use of archery equipment is a huge bonus to the community! Please don't take away this small area of the park devoted to the safe use and training in this sport, just to give it to other people who have the entire rest of the park to walk or jog.

Archers are not a "tiny minority" of the people who use the Lower Arroyo. In the City's usage survey commissioned by City Council, archers constituted 26% of observed recreational users during the period of the survey. This is a significant percentage of users, not a "tiny minority." On the other hand, it's also not a dominant percentage of users, which dispels the equally pervasive myth that the archers have been preventing the enjoyment of the Lower Arroyo west side by non-archers.

Archers don't just use the range on weekends! As documented by the City's usage survey, usage of the Lower Arroyo west side for archery averaged 26% of all users, peaking at 32% on Saturdays and otherwise averaging 21% on weekdays and 21% on Sundays. This is a full-time archery range open to the public and used by the public 7 days a week for archery. While the *number* of archers is lower on weekdays, that's true for other activities as well, in all city parks. The *percentage* of archery users on weekdays is no different than it is on Sundays. The popular instruction classes cause this percentage to be somewhat higher on Saturdays.

Many archers use the range on weekdays for practice. Pasadena is unique in having an archery facility where people can drop in any day of the week to practice the skills learned in formal classes. And they've been doing this for many decades. A local archer, Ken Moore, who won the NFAA national championship on the Pasadena range in 1942, advised prospective archers to get good equipment and instruction, and "after that, practice is the prime factor." He himself "used to practice daily" while "perfecting the technique." – LA Times, Feb. 2, 1943

7. The archery range is a public use, not an exclusive use:

Archery at the Lower Arroyo range is a public use, not a private exclusive use. The opponents of archery would have you believe that the public is excluded from the area occupied by the range. This is untrue. The Saturday morning archery classes and Sunday morning archery tournaments organized by the PRA are open to the public. For the remaining 85% of the hours during which the park is open, the range is available for archery use by the public. The PRA, while charged with maintaining the range, does not have – and does not desire – exclusive use of the area.

All members of the public are welcome in all City parks, but it's the City's responsibility to make sensible rules about what activities are permitted in different park areas. All members of the public can walk on the park trails, play golf on the public golf courses, and practice archery at the public archery range. The opponents simply want to exterminate one public recreational activity they don't like in return for a tiny increase in land area for the activities they approve of.

The archery range is not "devoted to an exclusive private use." It is available for public use for archery. The archery range is a designated-use area for a specific purpose, just like other City facilities such as Brookside Golf Course, the casting pond, tennis courts, basketball courts, Hahamongna Frisbee golf course, and the lawn bowling field. Such usage is consistent with Pasadena Municipal Code (3.32.110), which specifies that archery and hiking are examples of permitted activities, and that all permitted activities must be restricted to their defined activity areas.

It's not true that "virtually all of the west side" is for "exclusive use of the archers." At the request of Council, the City conducted a 2-week usage study of the Lower Arroyo west side within the area described by some archery opponents as "for the exclusive use of the archers at all times." This survey covered more than 49 hours of observations at 15-minute intervals. The City's observers counted 525 archers inside the archery range and 1461 passive users on City-maintained trails outside the archery range. More than 70% of the observed users were engaged in non-archery activities on legitimate west side trails outside the range.

The proposed agreement would do nothing to restrict the use of any existing trails. The agreement under consideration by the Council does not "permanently prohibit walking, jogging, dog-walking, birding and other forms of enjoyment of nature on the West side of the Lower Arroyo." All of these activities are currently allowed on the West side of the Lower Arroyo on existing trails that skirt the perimeter of the archery range. Under the proposed agreement, nothing changes with respect to these trails.

The archery range is for the whole public, not just the wealthy. Archery was a sport that could be practiced as far back as the 1890s in the backyards of Pasadena's landed gentry. Upon Pasadena's establishment of public archery ranges in the Lower Arroyo in the 1920s and 1930s, archery also became accessible to people of all income classes. Please keep this range open to the whole public!

8. The archery range isn't expanding or hogging too much space:

There's no truth to claims that the archery range is expanding. In fact, the history of archery in the Arroyo is one of consolidation rather than expansion! There once were three archery ranges in the Lower Arroyo. The Target Archery Range has been completely eradicated, and the old Sagittarius 3D Range (northern range) is now only used on 13 Sundays per year. All other archery activities have been consolidated into the Field Archery Range (southern range), which has stayed the same size (NFAA-standard 28 targets) since its earliest years.

A complete field archery range consists of 28 targets – just as a complete round of golf consists of 18 holes. It's well documented in the Los Angeles Times that the Pasadena field range already had 28 targets in 1942, the first year when NFAA adopted its Standardized Field Round. In that year, the NFAA field archery champion won his national championship shooting standardized rounds on the Lower Arroyo course! We believe that this historic course should be preserved in its entirety, and all 28 field targets should remain open to the public.

The size of the archery range is not 18 acres. And there is no plan to increase the current size of the range. According to Pasadena Public Works, the field range (southern range) is approximately 7.5 acres. This is the only permanent designated-use area for archery in Pasadena. An adjacent northern range occupying approximately 4 acres is a general-use area currently used for archery less than 8 hours per month with temporary targets only; at all other times the northern range area is closed to archery and open for alternative uses.

There is a lot of land available for public use in almost every city in America, but very few of those acres are dedicated to organized archery. No place in America has had a better record of providing training for people of all ages and skills.

Pasadena already has more than 22 miles of trails in the Arroyo alone, but only one archery range. Walkers have precedence over archers on all these trails winding through hundreds of acres in the Arroyo parks. These are all areas where archers are excluded from practicing their sport. It's pure greed for a privileged few to usurp the archers' last remaining haven comprising less than 10 acres. Why aren't the hundreds of acres of Pasadena parklands available for hiking and other passive recreation enough?

Devoting less than 1% of public parklands citywide to archery is a pittance, especially considering archery's burgeoning popularity. The City Council has a responsibility to look at the big picture — over 1000 acres of city parks and less than 10 acres designated for archery. By no stretch of the imagination is archery hogging more than a fair share of citywide public space. Pasadena's public field archery range is a big asset to the city and the entire region.

9. Different activities require their own defined space:

The archery range is by law a "defined activity area" for archery. Pasadena's Municipal Code requires that Lower Arroyo Park activities be confined to their defined activity areas. Archers can only engage in archery at the archery range, and nowhere else in the City is archery permitted. The people from the Casting Club can enjoy their hobby at the casting pond, but they're not allowed to practice casting in the natural stream area below the bridge. Golfers have their public courses at Brookside, and they're prohibited from playing golf outside a designated golf course. The list of examples could go on and on.

Sensible management of public parklands citywide should support a diverse set of recreational interests by all members of the public. Wherever two activities can't take place compatibly within the same space (such as archery and walking), the City gives precedence to one and prohibits the other. Walking has precedence over archery throughout Pasadena's parks with the single exception of the Lower Arroyo Public Field Archery Range. That range is the only defined activity area for archery in the entire city.

Defined activity areas are marked by defined boundaries. The proposal before the council aims to delineate the boundaries of the range more clearly through the use of natural barriers. This is as recommended in the LAMP to inform users engaged in one activity where they would start intruding into another activity's defined space. Defined boundaries promote safety and reduce interference between different uses of the park.

Archers should have their own space in Pasadena's parks, just like golfers. Pasadena has two public golf courses at Brookside where golfers can practice their chosen sport. The same principle applies to the archers at Pasadena's public field archery range in the Lower Arroyo. Both golf and archery need their own separate spaces, and these are the only places in the City where the general public can engage in golf or archery. Please keep Pasadena's golf and archery courses open to the public!

When the Lower Arroyo was designated as a natural preservation area, archery was named explicitly as one of the "low intensity recreational activities within defined activity areas, including hiking, horseback riding, archery, casting, picnicking and jogging," that are permitted uses of this area. That ordinance goes on to prescribe that "all existing uses may be allowed to remain but not allowed to expand." In other words, archery is not allowed to expand into non-archery areas, and the non-archery uses are not allowed to expand into the area designated for archery.

10. Field archery belongs in the Lower Arroyo:

There's no better place for the Field Archery Range than the Lower Arroyo Park. The renowned field archery pioneers who originally set up the Lower Arroyo field course in 1935 knew the requirements of their sport well, and they chose the ideal location for it. Squeezing three archery sports (field, target, 3D) into less than 10 acres in the Lower Arroyo has only been possible because the unique topography there is conducive to a much more compact field course design than the 15 to 30 acres more commonly used for NFAA ranges.

Field archery needs a natural setting like the Lower Arroyo. The sport of field archery was expressly invented to give archers the challenge of shooting in a natural woodland setting. A field archery range is therefore designed to have low impact on the natural habitat because the sport's very concept depends on preserving it.

The City has always recognized that archery is compatible with a natural area. The Arroyo Seco Public Lands Ordinance (1990) explicitly designated archery as one of the "low intensity recreational activities within defined activity areas, including hiking, horseback riding, archery, casting, picnicking and jogging," that are permitted within the natural preservation area. This designation was reaffirmed in the Lower Arroyo Master Plan (2003), adopted after years of citizen input. Before and since, the City has always recognized that field archery is exactly the type of low-impact use that belongs in this natural area and not in a more developed area like the Central Arroyo.

Archers have used this area for decades with little or no adverse environmental impact. The Lower Arroyo Range is a fantastic place where many people have learned to shoot archery for the past 80 years. It's the best archery course in LA. It is varied and gives a good workout. People jog along the outside or ride horses while the archers practice their sport. The Lower Arroyo Park is a great place for all of these activities to go on alongside one another. Archery in this park has provided a positive experience for generations of adults and kids, teaching sportsmanship and skill in a positive social setting.

Eaton Canyon is no substitute for the Lower Arroyo. The site of an old gun range in Eaton Canyon might provide a suitable location for a smaller target archery range, which could be used for public archery instruction to off-load peak demand on Saturday mornings. However, a field archery range can't come close to fitting in the space of a gun range or target archery range.

"The functioning archery range is a crucial part of the wonderful Arroyo ecosystem and the social environment of the entire area. There's no other place like it, and it would be a devastating loss for Pasadena and the surrounding areas if new limitations were imposed on its use." – Ross McLean, South Pasadena

"I think the archer range is a great resource and must be preserved. It adds to the wildness of the Arroyo. There's something primitive about archery and it simply belongs there. To remove it would to chip away at Pasadena's heritage. I would hope the city would protect it in the name of preservation."

– Teresa Salerno, Pasadena

11. Most archers and non-archers coexist with each other happily:

Most passive users are happy with the existing trails outside the range. The City's usage survey revealed that a majority of passive users (61%) already use the wide multi-use trail adjacent to the flood channel, and a somewhat smaller percentage (35%) prefer the more rustic trail that skirts the range's eastern perimeter. Only a tiny minority of passive users (4%) insists on walking through the archery range, endangering themselves and disrupting the archers' right to enjoy their time in the park.

Participants in diverse activities in the Arroyo parks coexist with each other to the benefit of all. Joggers on the Rose Bowl loop don't insist that golfers stop hitting golf balls, frisbees and softballs often take simultaneous flight at Hahamongna, and archers coexist in harmony with their West Pasadena neighbors and Lower Arroyo walkers. Supporting such a wide range of activities enhances the City's sterling reputation and local residents' quality of life.

Regular archers at the range get to know the non-archers as well. They know the names of the dogs being walked (who run up and greet them). People taking walks stop and ask about archery. Those who are curious about the sport can see it and talk to someone about it.

PRA and the archers have been good neighbors to West Pasadena residents. Despite opposition from a handful of vocal or litigious nearby landowners, PRA and the archers have enjoyed the support of the two major neighborhood groups in the area, the West Pasadena Residents' Association (WPRA) and the San Rafael Neighborhoods Association (SRNA).

"I enjoy seeing the archers in the arroyo when I walk there. They are not harming anyone & deserve to continue their sport in peace." – Joyce Breslin, Pasadena

"I hike in the Arroyo every day and walk right along the archery area. It has never been a problem to enjoy the Arroyo alongside the archers. We share the space safely and we both enjoy the recreation of this beautiful, public space." – Katrina Alexy, Los Angeles

"I jog by this three times a week. It is always fun to see and everyone seems so happy there. It does not interfere with my jogs, but adds a fun stop off point to marvel at what they are doing. Please keep it around." – Zak Staniszewski, Pasadena

"As a frequent runner on the Arroyo trails, I have found the archers to be friendly and courteous. I am in favor of maintaining the archery range in its present status, with improved marking for designated trail areas for running and walking adjacent to the archery area. As a long-time runner, I've found off-leash dogs and careless dog owners to be by far the greatest hazard in use of this area, not the archers." – Dennis O'Leary, Pasadena

"I'm not an archer But I enjoy watching those who are. On many occasions I have taken the opportunity to talk with those with bow and arrow and have learned about the sport, tournaments and equipment. The archers are part of the interesting fabric it is The Arroyo."

– Donald Milner, Pasadena

12. Archery and PRA are a great community resource:

What is offered by PRA and Pasadena is unique. Its contribution to the sport of archery and the community of Pasadena should be considered with pride. Try to find program like this anywhere else. Countless families have had the benefit of their instruction, encouragement, and welcoming fellowship. If more residents of the city would visit just one weekend class, its value would be quickly understood.

The PRA's archery classes are a great community resource. The instruction program conducted by the Pasadena Roving Archers (PRA) is well run, safe, and creates a strong and positive learning environment. The diversity of people who show up weekly for lessons is amazing. To lose this facility would be a disservice not just to the Pasadena community, but also to the world of sport.

Tradition, charity, and education are important. These are the pillars upon which a great community depends. There are few better uses for public land than that which the Pasadena Roving Archers have provided to members of the Pasadena community for generations. Banning one exemplary use of this land does not promote other uses, such as "birding." Rather, it erodes the confidence of volunteers and community members who might consider investing their time in building a tradition of any use, lest they too be considered a nuisance by a few homeowners, and have that use banned as well.

The Lower Arroyo archery range contributes significantly to Pasadena's quality of life. Every Saturday morning the west side of the Lower Arroyo transforms into a big community center. It's a wonderful place. This range is easily one of the best field ranges in the country, with a wonderful environment, wonderful people who volunteer their time there and introduce the local youth to the sport. There is no good reason to diminish such a wonderful place. The Pasadena Roving Archers have contributed so much to the sport of archery, and continue to do so to this day. Let the archers keep doing what they love.

The most important part of a community is the range of outlets that can bring people together in meaningful ways. The preservation of the Lower Arroyo Archery range is about preserving the richness and diversity of our community. Not only does the archery range provide a service to the community, it also builds community between people in and around the area of Pasadena. It's incredible to see an outside activity engage and inspire young people to get out and get active!

"This place is wonderful. I learned to shoot here, and also formed friendships. Without a doubt one of the kindest and most generous groups of people. A truly life changing place."

- Conor O'Callaghan, Pasadena

13. The archery range draws people and business to Pasadena:

The archery range is a boon to local Pasadena businesses. The City of Pasadena is actively seeking ways to attract people from outside the city in order to increase revenue. The regional draw of prestigious facilities like the Rose Bowl and the Field Archery Range brings visitors to the city who spend money here. Pasadena's wise policy to invest in regional recreational assets distinguishes it from its neighbors, and this effectively redirects money to Pasadena businesses that would otherwise be spent in more parochial cities that don't invest in such facilities. This is why Pasadena's Chamber of Commerce supports the archery range.

It's absurd that non-residents are viewed as outsiders who are not welcome to use the archery range. Yet these same outsiders are perfectly welcome to come to the same Lower Arroyo Park to jog or walk their dogs. By what rationale are out-of-town dogs welcome in the park but not out-of-town bows and arrows? No one objects to non-residents at the golf course or the Rose Bowl, but somehow things are different for the archery range? No, the money that out-of-towners spend patronizing your city's businesses doesn't depend at all on which activity they choose to engage in when they visit your city's parks.

Archery opponents are blatantly inconsistent about non-resident use of "sacred" space. Opponents complain loudly that too many archers at the range come from outside Pasadena. Yet they propose to open the range to other uses such as walking without imposing any residency requirements. Apparently, they believe that these alternative users will be mostly residents, because the park isn't special enough to attract non-residents for purposes other than archery. In other words, the Lower Arroyo must be a really "sacred" place for archers throughout the local region, but not so "sacred" for walkers!

PRA volunteers, resident or not, provide an enormous community service and are a tremendous asset to the city. At the last Council meeting discussing this issue, it was absurd how some Councilmembers kept pressing to know the fraction of Pasadena Roving Archers who don't reside in Pasadena. How many instructors live in Pasadena? Who cares!? Some volunteers routinely drive from as far away as Riverside to spend their Saturday mornings providing public archery instruction. Without compensation. For whoever shows up and wants to learn archery – including residents of Pasadena. The fact that some volunteers are not Pasadena residents deprives no one of any benefit.

Archery is a big draw to the area even though the range takes up only a small portion of the Arroyo. The archery range is one of the things that distinguish Pasadena as a unique city. The citizens of Pasadena are blessed to have a facility of this caliber available to all. Please keep this unique sport in the area!

"Archery is a great activity for all ages. Outdoor spaces for this kind of activity are limited in the Los Angeles area. Archery is a peaceful, mindful meditation similar to practicing your golf swing at the driving range. Facilities such as this range are one of the reasons why I spend so much time in Pasadena."

- Anthony Bell, Alhambra

14. The field archery range is an important historic treasure:

The field archery range is a crown jewel among Pasadena's recreational facilities. This range has been in the Lower Arroyo for 80 years, and it is the oldest continuously operating field range in the entire world. In fact, the range is older than the NFAA itself!

It's the St. Andrews of field archery courses. Pasadena's public range can be considered the historical home of field archery in the same way that the St. Andrews Old Course (another public facility) is universally recognized as the historical home of golf. The City should take pride and actively promote this unique facility. It should not threaten to shut down or restrict public use of one of its most historic treasures.

Historic sites don't need to be buildings. The archery range is a part of Pasadena's rich history, much like the Brookside Golf Course. As such, it should be preserved in its entirety. The archery range provides an opportunity for anyone and everyone to learn and enjoy the sport of archery.

The Lower Arroyo archery range is a treasure to the TV and movie industry. The Lower Arroyo range was the place where the archery tournament in the famous Robin Hood movie starring Errol Flynn was filmed in 1938. The TV/movie industry keeps returning to this location because of its historical significance, its local convenience, and its continued use as an active archery facility. The City would be depriving itself of this extra source of income and continuing positive publicity if it were to shut down this historic range.

The Pasadena range is the only public field archery course in the LA area. Archers appreciate the variety and challenge of the course and its incredible history. It's the only public field archery course in this area, and it needs to be preserved!

The Lower Arroyo field archery range is a unique treasure, with a unique history. In the Central Arroyo, Pasadena has college football's "granddaddy of them all," the world-famous Rose Bowl constructed in the 1920s. A bit upstream, there's another "granddaddy of them all," the Hahamongna Disc Golf Course where the sport of disc golf was born in the 1970s. And downstream, there's the Arroyo's third "granddaddy of them all," the historic Field Archery Range, established in 1935 and the oldest surviving field archery range in the world. No other place in the world has such a high concentration of "granddaddy of them all" historic sports treasures as Pasadena's Arroyo parks. No other Great City can match Pasadena's unique legacy of recreational inventiveness and mixed-use stewardship of its natural parkland.

Iraheta, Alba

From:

cityclerk

Subject:

FW: Archery in the Arroyo

From: Alison McAlpine [mailto:alisonmcalpine2@gmail.com]

Sent: Saturday, January 31, 2015 9:20 AM

To: Bogaard, Bill

Subject: Archery in the Arroyo

Dear Mayor Bogaard:

Please do not shut down then entire west side of the Arroyo to multiple users reserving it only for the use of the Archers. This is not fair and while I know the City is concerned with safety of users and lawsuits targeting City funds, the solution to this problem should not be at the expense of the vast number of users, walkers, runners, dog and horse folks. That would be most heavy handed and just plain wrong.

Thank you for your attention to this important matter. Sincerely, Alison McAlpine

Iraheta, Alba

From: Toby McGill <tobymcgill@att.net>
Sent: Friday, January 30, 2015 2:25 PM
To: Bogaard, Bill; Jomsky, Mark
Subject: Archery Range in the Lower Arroyo

Dear Mayor Bogaard, City Council and City Clerk, Mark Jomsky,

I am a resident of West Pasadena. My family and I have enjoyed walking in the Lower Arroyo for 40 years and we request that a fair and safe plan be established for the use of the Archery Range.

Those of us who use the Lower Arroyo know that it is just a matter of time before someone – on or off the Range – will be hit by an arrow, and we pray it will not be fatal.

WHY:

- There has been a tremendous expansion in archery use in the Lower Arroyo in recent years, overburdening what Pasadena has designated a "nature preservation area."
- It is unacceptable that a private group has control of almost half of the usable open space in the Lower Arroyo.
- Neighbors to the west of the Archery Range have limited use of their properties because of falling arrows. One neighbor has collected more than 70 arrows that have fallen on his land.
- Today's bows and arrows are powerful and lethal weapons.
- Conflicts between archers and other users of the Arroyo are increasing.
- There are numerous reports of arrows almost hitting pedestrians and/or joggers.
- Archers come from throughout LA County and few are Pasadena residents.
- There is drinking, smoking and shooting arrows even after nightfall.

A Solution:

- Limit the days and hours when the Archery Range is open to weekends only.
- Improve signage and use flags to alert pedestrians and others when the Range is open for archery use.
- Targets must be closed and locked when the Range is closed.
- Trained Range officers must be present whenever the Range is open to assure that rules are followed.
- Adopt City staff rules for licensing, training classes and a reasonable fee structure.

Warmly,

Toby McGill and family

Iraheta, Alba

From:

cityclerk

Subject:

FW: Archery Range does Not Meet NFAA Standards

Attachments:

170-2005404-Archery_Range_Guidelines.pdf

From: Doctordyno [mailto:doctordyno@aol.com]
Sent: Sunday, February 01, 2015 1:43 PM
To: doctordyno@aol.com; Jomsky, Mark

Cc: Madison, Steve; Bogaard, Bill; Robinson, Jonathan (DOIT); Masuda, Gene; Kennedy, John; McAustin, Margaret;

Tornek, Terry; Gordo, Victor

Subject: Archery Range does Not Meet NFAA Standards

Comments rergarding Deal Point #3.e in the proposed agreement

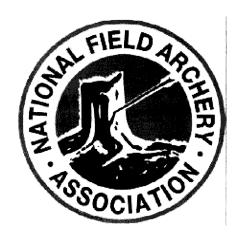
The current archery range does not meet the current standards of the National Field Archery Association.

- a 1. A backstop of 12'X8' is required behind each target (butt). No such backstops are in place.(see page 9 of the attachment)
- b 2. Safety zones of a minimum of 25 yards must in place behind each target so that "in no case should an errant arrow cross the range boundary, even if the adjoining property is uninhabited…all the safety buffer zones must be included within the total range area requirements."(page 7). The targets are directly in front of private property which extends down to the bottom of the hill there is no 25 yard clearance behind the targets.

Finally, comments have suggested that the archery range occupies no more than 7 acres. However, according to the NFAA, the rule of thumb is one acre per target. That would be 28 acres. Furthermore, 28 targets are not needed for field archery tournaments. Please note in the guidelines that 14 targets could be used twice for a total of 28. It is critical that history not be rewritten by changing the LAMP.

For complete NFAA Archery and Bowhunter Guidelines please see the attached or http://www.fieldarchery.org/depot/documents/170-2005404-Archery%20Range%20Guidelines.pdf

Dianne Philibosian, Ph.D. 436 South Arroyo Blvd. Pasadena, CA 91105 626 440 0585 626 440 0031 fax DoctorDyno@aol.com



NFAA[®] Archery and Bowhunter Range Guidelines

by

Paul H. Davison
Consultant, Archery Range Development

SPECIAL NOTICES

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- ♦ It is suggested that all questions regarding document maintenance and change control be directed to the author at stringwalker@worldnet.att.net.
- ◆ These guidelines are the abridged and updated range guidelines originally documented in *Archery and Bowhunter Range Guidelines*, published by the author during the period 1992-1995.
- These guidelines are presented for information only, and are not to be treated as officially certified design or safety specifications. Neither the author nor the NFAA assume any liability for the use or misuse of these guidelines.

CONTENTS

Section	Page
Introduction	iii
I – Summary of Outdoor Archery Games	1
I.A. Field Archery	
I.B. Target Archery	
I.C. Outdoor Target Archery	4
I.D. Bowhunter Rounds	5
II – Outdoor Range Layout and Size Requirements	6
II.A. General	
II.B. Field Archery Range	6
II.C. Target Archery Range	7
II.D. Bowhunter Range	
III - Outdoor Target Butt and Backstop Construction	9
III.A. Field Archery	9
III.B. Target Archery	
III.C. 2-D Animal Targets	10
III.D. 3-D Animal Targets	
IV Outdoor Range Facilities and Accessories	
IV.A. Items Any Archery Range Can Use	11
IV.B. Field Archery Range Items	
IV.C. Target Archery Range Items	
IV.D. Bowhunter Range Items	
V – Designing an Outdoor Range for Safety	
V.A. General Range Safety	
V.B. Field Archery Range Safety	
V.C. Bowhunter Range Safety	
VI – Summary of Indoor Archery Games	
VI.A. NFAA/IFAA Indoor Round	
VI.B. Vegas Round	
VII – Indoor Range Layout and Size Requirements	
VII.A. Shooting Distances	16
VII.B. Lane Width and Side Clearance	
VII.C. Height Clearance	
VII.D. Overall Range Dimensions	
VIII – Indoor Target Butt and Backstop Construction	
VIII.A. Target Butt Dimensions	
VIII.B. Target Butt and Backstop Materials	
IX – Indoor Range Lighting, Accessories, Special Equipment and Safety.	
IX.A. Lighting	
IX.B. Routine Indoor Range Accessories	18
IX.C. Specific Items Needed for Indoor Leagues and Tournaments	
IX.D. Some Special Safety Precautions for Indoor Ranges	
X – Designing a Range for Wheelchair Accessibility	
X.A. Types of Physically Disabled Archers	
X.B. Indoor Ranges	
X.C. Outdoor Target Ranges	
X.D. Field Archery and Bowhunter Ranges	∠U

INTRODUCTION

In 1991, as part of a nationwide program to develop new and more places for bowhunters and recreational archers to learn, practice and demonstrate their skills, the **American Archery Council (AAC)**, under principal sponsorship of the **Archery Manufacturers and Merchants Organization (AMO)**, began providing some basic guidelines for the acquisition and development of archery and bowhunter ranges. The fourth and most popular booklet in the series was *Archery and Bowhunter Ranges Guidelines*, revised most recently in 1995, and now out of print. The fifth booklet, *Cost Sharing the Development of Archery Ranges*, revised most recently in 1994, was published by the AMO as a comprehensive guide to sources of financial and advisory assistance. Although still somewhat useful, the guidelines listed in both booklets are out of date.

The original Archery and Bowhunter Ranges Guidelines defined range, target butt, and safety design criteria for virtually every indoor and outdoor archery game offered by the major, competition-oriented, archery and bowhunter organizations in the United States. The amount of detail describing the games in this document is substantially reduced, and is limited to summaries of those games sanctioned by the National Field Archery Association (NFAA) in the USA, and to subtle variations of these games sanctioned worldwide by the International Field Archery Association (IFAA). The range design criteria presented, however, are little different from that published in the original Archery and Bowhunter Range Guidelines.

Section I leads off with a cursory description of almost all outdoor archery games defined by the NFAA and IFAA. These games come in three versions: *Field* Archery, *Target* Archery and *Bowhunter* Rounds. **Section II** then attempts to define basic lay-out design criteria for each version. **Section III** follows with outdoor target butt and backstop construction, including some do-it-yourself ideas, while **Section IV** lists several "Don't Forget" items and equipment needed to make a successful field, target and bowhunter range. **Section V** is a comprehensive list of outdoor range safety issues, which, in the final assessment, determines whether your range is GO or NO-GO for hosting competitive events.

Section VI summarizes the most popular NFAA/IFAA indoor archery games. Then, based on the fact that nearly all indoor archery games are shot at 20 yards, minimum dimensions (length, width and height) for an indoor range are recommended in **Section VII**. Requirements and suggestions related to indoor target butts, backstops, lighting, peripheral equipment, and safety are outlined in **Section VIII** and **Section IX**. Finally, in **Section X**, and as an addendum to the original *Guidelines*, a few design guidelines for making ranges wheelchair accessible are outlined.

These guidelines contain very little original material. All target and round descriptions are merely summaries of official rules and regulations documented in the NFAA *Constitution and By-Laws* and the IFAA *Book of Rules*. Specific shooting and scoring rules are not delineated herein. Furthermore, these guidelines do not address any aspects of commercial archery range development; such as, design specifications, drawings, financing, construction, insurance and retail management. To be more emphatic:

THE GUIDELINES HEREIN ARE NOT INTENDED TO BE STAND ALONE.
NO ATTEMPT SHOULD BE MADE TO SET UP A RANGE OR COMPETITIVE
ARCHERY PROGRAM WITHOUT CONTACTING AND/OR JOINING THE
NFAA NATIONAL ORGANIZATION

SECTION I SUMMARY OF OUTDOOR ARCHERY GAMES

I.A. Field Archery

Field archery is a roving archery game in which successive targets are shot at varying distances. The game was created as a practice round for bowhunters, but was soon standardized as a competitive round for any archer to enjoy. In a way, field archery is analogous to golf, as is sporting clays analogous to field archery; that is, each "target" is different, and you move from "hole-to-hole."

I.A.1. NFAA/IFAA Field Round

I.A.1.a. Standard Unit. A standard unit consists of four shots each at 14 different targets. The 14 targets are (not in any order):

- ◆ 15, 20, 25 and 30 yards at a 35-cm face (4 total).
- ◆ 40, 45 and 50 yards at a 50-cm face (3 total).
- ◆ 55, 60 and 65 yards at a 65-cm face (3 total).
- 35-yd, 4-position "fan" at a 50-cm face (1 total).
- ♦ 4-position "walk-ups" (3 total):
 - ♦ 35-30-25-20 feet at a 20-cm face.
 - ♦ 45-40-35-30 yards at a 50-cm face.
 - 80-70-60-50 yards at a 65-cm face.

The foregoing distances are for adults. NFAA youth (or IFAA juniors) and cubs shoot at reduced distances in all outdoor archery games. See the NFAA Constitution and By-Laws and the IFAA Book of Rules.

I.A.1.b. Targets. Four target sizes shall be used. The outer ring diameter shall be 65 cm, 50 cm, 35 cm, and 20 cm. The spot shall be two black rings (with white X in the center ring), two white middle rings, and two outside black rings. The X-ring is used for tiebreakers only. The rings have the following diameters:

Target Diameter	65 cm	50 cm	35 cm	20 cm
Outer outside black ring	65 cm	50 cm	35 cm	20 cm
Inner outside black ring	52 cm	40 cm	28 cm	16 cm
Inner outside black ring	39 cm	30 cm	21 cm	12 cm
Inner middle white ring	26 cm	20 cm	14 cm	8 cm
Black center spot	13 cm	10 cm	7 cm	4 cm
X-ring	6.5 cm	5 cm	3.5 cm	2 cm

The scoring is 5 points for the center spot, including the X-ring; 4 for the two white rings; and 3 for the outside black rings

To minimize glance-outs and arrow damage, multiple target faces may be used at all distances, but are generally used only at the shorter distances. For example, the minimums are:

- Sixteen (NFAA) or eight (IFAA) 20-cm faces per butt.
- Four (NFAA) or two side-by-side (IFAA) 35-cm faces per butt.
- Two side-by-side (NFAA only) 50-cm faces per butt.

RangeGL000501.doc

I.A.1.c. Summary of Shooting and Scoring Rules. Each archer shoots four arrows at each of the 14 targets. The order in which these targets are shot depends entirely on the range layout. For ten of the 14 targets, the archer shoots four arrows from a single stake at a single target face. For the remaining four targets, the archer shoots one arrow from each of four stakes at a single target.

As noted above, a perfect score is 5 per arrow, or 20 per target, or 280 per 14-target unit. A standard "round" is two 14-target units, with 560 points as perfect.

I.A.2. NFAA/IFAA Hunter Round

I.A.2.a. Standard Unit. As with the Field Round, a Hunter Round standard unit consists of four arrows each at 14 different targets:

- ♦ Single-position (4 total):
 - ♦ 40, 44, 48 yards at a 50-cm face.
 - ♦ 11 yards at a 20-cm face.
- ♦ 4-position walk-ups (4 total):
 - 53-48-44-41 yards at a 50-cm face.
 - ♦ 58-53-48-45 yards at a 65-cm face.
 - 64-59-55-52 yards at a 65-cm face.
 - ◆ 70-65-61-58 yards at a 65-cm face.
- ◆ 2-position walk-ups (3 total):
 - 23-20, 19-17, and 15-14 yards at a 35-cm face.
- 4-position fans (3 total):
 - ♦ 36 yards at a 50-cm face.
 - ♦ 28 and 32 yards at a 35-cm face.

I.A.2.b. Targets. The target has two white rings with black X in center ring, and two outside black rings. The X-ring is used for tie breakers only. The rings have the following diameters:

Target Diameter	65 cm	50 cm	35 cm	20 cm
Outside black ring	65 cm	50 cm	35 cm	20 cm
Middle black ring	39 cm	30 cm	21 cm	12 cm
White center spot	13 cm	10 cm	7 cm	4 cm
X-ring	6.5 cm	5 cm	3.5 cm	2 cm

The scoring is 5 points for the center spot, including the X-ring; 4 for the middle black ring; and 3 for the outside black ring. Again, multiple target faces are used at the shorter distances. The NFAA and IFAA minimums are the same as noted for the Field Round.

I.A.2.c. Summary of Shooting and Scoring Rules. As with the Field Round and except for the 11-yd "birdie," four arrows are shot from a single stake at a single face for the one-position targets. For the 4-position walk-ups, one arrow is shot from each stake; for the two-position walk-ups, two arrows are shot from each stake at a single face; and for the 4-position fans, two arrows each are shot at the left and right faces. Shooting and scoring rules are the same for both the Hunter and Field Round. In fact, an official 28-target "Round" may consist of any combination of Field or Hunter 14-target units.

I.A.3. NFAA/IFAA Animal Round

- **I.A.3.a. Standard Unit.** A standard unit for the Animal Round consists of a single "scored" shot at 14 different targets. A maximum of three arrows may be shot at each target, but only the arrow scoring the highest value is counted. The 14 targets consist of (see I.A.3.b. for target descriptions):
 - Three, Group 1 targets at marked distances varying from 60 yards down to 40 yards.
 - Three, Group 2 targets at marked distances varying from 45 yards down to 30 yards.
 - Four, Group 3 targets at marked distances varying from 35 yards down to 20 yards.
 - Four, Group 4 targets at marked distances varying from 20 yards down to 10 yards.

Group 1 and 2 targets are 3-position walk-ups, with the intervals generally 5 and 3 yards, respectively. Group 3 and 4 targets are single-position.

- **I.A.3.b.** Targets. Each animal target has two scoring areas a "vital" or "kill" zone, and a "non-vital" or "wound" zone. The higher scoring vital areas are oblong in shape and have the following "rough" dimensions (NFAA and IFAA slightly different) for each of the four Groups:
 - Group 1: 9 x 14 inches. These targets include black bear, grizzly, moose, deer, caribou and elk.
 - Group 2: 7 x 10 inches. These targets include small black bear, antelope, ram, small deer, mountain lion and wolf.
 - Group 3: 4 x 7 inches. These targets include raccoon, javelina, wildcat, coyote, turkey, fox, goose and pheasant.
 - ♦ Group 4: 2¼ x 3½ inches. These targets include duck, turtle, grouse, rock chuck, wood chuck, skunk, jack rabbit and crow.

The lower scoring, non-vital, scoring zones have identical areas in each group, but are shaped to fit the particular animal.

I.A.3.c. Summary of Shooting and Scoring Rules. A maximum of three, marked arrows may be shot, in order, at each target. For the Group 1 and 2 walk-ups, the first arrow is shot from the farthest stake, the second arrow from the middle stake, and the third arrow from the nearest stake. If the first arrow scores (either vital or non-vital), then there is no need to shoot the second arrow. If the first arrow misses, and the second arrow scores, then there is no need to shoot the third arrow. The third arrow is shot only if the first and second arrows are suspected misses. In no case can anyone walk up to a target, and then walk back to shoot a second or third arrow in the event of a missed shot. If you're not sure you scored, then always shoot the next arrow! For Group 3 and Group 4 single-position targets, the second and third shots, if needed, are shot from the same stake as the first shot.

The scoring is as follows:

- ◆ 1st arrow vital 20 points.
- 1st arrow non-vital − 18 points.
- ♦ 2nd arrow vital 16 points.
- ◆ 2nd arrow non-vital 14 points.
- ♦ 3rd arrow vital 12 points.
- ♦ 3rd arrow non-vital 10 points.

As with the Field and Hunter Rounds, a perfect score for a 14-target Animal Round is 280 points.

I.B. Other Related Field Archery Games

I.B.1. NFAA 15-Target "300" Rounds

The "300" Round was created several years ago as way to eliminate the "dreaded 80 yarder" from the standard NFAA Field Round. The maximum shooting distance is reduced to 65 yards, thereby enticing bowhunters to try Field Archery. Also, even though there's an extra (but short) target added, the 15-target "300" Round requires no more land for a range than for the 14-target Round.

- **I.B.1.a.** "300" Field Round. This round is the same as the 14-target Field Round except that the 80-70-60-50 yard walk-up is replaced by a 65-60-55-50 yard walk-up, and a 30-25-20-15 yard walk-up is added.
- **I.B.1.b.** "300" Hunter Round. This round is the same as the 14-target Hunter Round except that the 70-65-61-58 yard walk-up is replaced by a single-position, 58 yard target, and a 32-28-24-20 yard walk-up is added.
- **I.B.1.c.** "300" Animal Round. This round is the same as the 14-target Animal Round except that a fifth Group 4 target is added.

I.B.2. NFAA/IFAA International Round

- **I.B.2.a. Standard Unit.** A standard unit consists of three shots each at ten different targets ranging from 20 through 65 yards, in 5-yard increments. Also, NFAA youth (or IFAA juniors) and cubs shoot at reduced distances. As with the Field and Hunter Rounds, the targets don't have to be shot in any particular order. In fact, the International Round is usually shot as a roving game on a field course by merely not using the 80-yd and 45-yd walk-ups, the 15-yd target, and the 35-ft walk-up. This round is also ideally suited for a target-type archery tournament in a typical public park setting (see Section I.C.). Here, the targets are usually shot in ascending order from 20 through 65 yards.
- **I.B.2.b.** Targets. The International Round uses the same 35-cm, 50-cm and 65-cm black faces used in the NFAA/IFAA Hunter Round. The 35-cm face is shot at 20, 25 and 30 yards; the 50-cm face at 35 through 50 yards; and the 65-cm face at 55, 60 and 65 yards. Use of multiple target faces at the shorter distances is encouraged.
- **I.B.2.c.** Summary of Shooting and Scoring Rules. Three arrows each are shot at the ten targets, yielding a perfect score of 150 for the standard unit. An International Round consists of two, 10-target units (either repeat of one, or two different) for a perfect score of 300.

I.C. Outdoor Target Archery

Target Archery includes any one of the classic archery games laid out on a relatively flat, treeless field or park-like area. The archers shoot simultaneously, and generally walk back to the "static" shooting line after each "end," rather than moving on to the next target as in Field Archery. FITA ("Olympic style") target archery games are not treated herein.

I.C.1. NFAA 900 Target Round

The 900 Round consists of 30 arrows each at 60, 50 and 40 yards using the standard 122-cm FITA face. There are five, 6-arrow ends at each distance, in descending order. Scoring is as follows: inner gold - 10, outer gold - 9, inner red - 8, outer red - 7, inner blue - 6, outer blue - 5, inner black - 4, outer black - 3, inner white - 2, and outer white - 1. Perfect score is (3 distances) x (30 arrows/distance) x (10) = 900.

I.C.2. American Round or NFAA 810 Round

This round is the same as the 900 Round except that only the five "colors" are scored. That is 9 for gold, 7 for red, 5 for blue, 3 for black and 1 for the white ring. Perfect score is (3 distances) x (30 arrows/distance) x (9) = 810.

I.D. Bowhunter Rounds

There are about as many different outdoor bowhunter rounds as there are competitive bowhunter organizations. For good reasons, the following descriptions are deliberately kept simple.

I.D.1. NFAA 3-D Round

Although generally left up to the host club, a standard round usually consists of one shot each at 25 different 3-D animal targets. The NFAA National Unmarked 3-D Championship consists of one unit each day for two days. Adult shooting distances are nominally less than 50 yards. There are also youth and cub stakes at each target.

The target configurations and scoring rules are also flexible and are host-choice, but with approval prior to the tournament by the NFAA.

I.D.2. IFAA World Bowhunter Championship (WBHC) Rounds

In order to limit expenses incurred by the host organization, at least two WBHC Rounds are shot using paper (i.e., 2-D) animal targets. The remaining rounds (two or more) are host's choice, and may be any one of the six 2-D or 3-D rounds defined in the IFAA *Book of Rules*.

I.D.2.a. Compulsory Round(s). The Compulsory Round is essentially the same as NFAA/IFAA Animal Round above, except that all distances are unmarked and the paper animal targets may any one of several commercial targets approved by the IFAA.

I.D.2.b. Alternate Rounds (Host's Choice) The 28-target WBHC Alternate Rounds are quite varied, and are described in detail in the IFAA *Book of Rules*. In summary, these are:

- IFAA Unmarked Animal Round (same as Compulsory Round).
- 3-D One-Shot Round (similar to NFAA 3-D Round).
- ◆ 3-D Two-Shot Round.
- ♦ Special Animal Round (mixture of Timed Targets, Herd Targets, Group Targets, and Classical Animal Targets).
- ♦ Precision Round.
- Game Trail Round (includes tree stand and moving targets).

SECTION II OUTDOOR RANGE LAYOUT AND SIZE REQUIREMENTS

II.A. General

Safety is the overwhelming factor dictating range size. The actual shooting lane dimensions account for only a very small fraction of the total area requirement. Terrain is also quite important, especially in the layout of field and bowhunter ranges. Proper use of terrain can alleviate many safety concerns, particularly in providing natural backstops and buffers.

II.B. Field Archery Range

The development of a good field archery range always starts with a well thought-out plan. First, make a surveyor-type sketch of the property showing significant contours, creeks, etc. Better yet, use a large scale topographical map. Second, make a preliminary range layout on the topo sketch or map, considering all the safety criteria described below. [Be conservative!] Third, with three teams of two people each, stake each target's shooting line and target butt position carefully with respect to:

- The current target's orientation (distance and direction).
- The previous target's orientation, particularly the location of its target butt.
- ♦ The next target's orientation, particularly the location of its shooting line.

Hopefully, these steps will provide some assurance that you can actually have a good and safe range before committing lots of labor and dollars.

The NFAA has four size-related guidelines for laying out a field range (the IFAA's requirements are similar, but not as definitive):

- If the target is not backstopped (either fabricated or earthen), 25 yards or one-half of the target distance, whichever greater, shall be cleared behind the butt. [Note: This guideline was formulated in the recurve era. Today, it is suggested that "more-the-better."]
- A minimum clearance of 25 to 50 (safest) feet, depending on terrain and target distance, shall be provided between any path or shooting lane paralleling another shooting lane. Fifteen yards (45 feet) is a good compromise.
- ♦ The distance on each side of the target butt shall be greater than the target distance times the tangent of 15° to 30° (safest), depending on terrain and target distance. As a compromise, the tangent of 26.5° is 0.5, making it easy to "stake out" while surveying the range. For example, the safety zone on either side of a 40-yd target butt is 40 x tan(26.5°) = 40 x 0.5 = 20 yards. The buffer zone behind this 40-yd butt would therefore be 25 yards deep by 40 (20 + 20) yards wide. This means that no waiting area or shooting position should be closer than 25 yards from a 40-yd target butt. See below for examples of other target distances.
- ♦ The target lanes must be sufficiently wide to support two archers shooting simultaneously side-byside. Four-wide is highly recommended for the longer walk-up targets, which always seem to take longer to shoot.

In summary, and for initial range layout planning, the recommended safety zones to **each side** and **behind** field archery target butts are:

	Target Distance	Half-Width at Butt	Depth Behind Butt
	Up to 30 yds 15 yds		25 yds
	30 to 50 yds	One-half target distance	25 yds
50 to 80 yds One-half target distance		One-half target distance	One-half target distance

The foregoing safety guidelines assume that in no case should an errant arrow cross the range boundary, even if the adjoining property is uninhabited. In other words, all the safety buffer zones must be included *within* the total range area requirements.

As mentioned before, terrain has a significant influence on field archery range layout and size. Ideally, the targets are laid out such that the archer never has to walk back on the lane just shot. [Exceptions are targets about 30 yards and less.] These walk-back targets require less land, but are an aggravation during tournaments because of the time wasted waiting for the lane to clear. More walking is required, too. "Walk-throughs," as on a golf course, are always preferred.

A reasonably shallow (and dry) gully, ravine, arroyo or similarly hilly terrain can be a great asset to a field or bowhunter range. Shooting from bank-to-bank, back-and-forth, across the gully not only provides natural backstopping, but reduces area and shooting-time requirements. Box gullies or canyons, which may be considered "waste areas" by others, are ideally suited to the field archer or bowhunter. On the other hand, waste areas subject to flooding are really only suited for large tournaments using temporary facilities. Flood plains are too flat and too risky. [Foam butts and 3-D targets float!]

Field ranges are often laid out in 14-target "loops," where all of the shots are outward, away from the center of the loop. This arrangement requires more land area because the center of the loop is not used, and because a large buffer area is needed around the perimeter. With judicious planning, however, the central core could contain a clubhouse and/or parking lot. In any case, the range should be laid out such that the Target 1 (and 15) entrance and Target 14 (and 28) exit are near the clubhouse or assembly area.

With the right terrain and under perfect conditions, a safe, 28-target field range, with no long walk-backs and with no fabricated backstops, but with a 10-target practice range, clubhouse and modest parking lot, *can fit on about 20 acres*. Thirty acres is more comfortable. 28-target ranges with lots of walk-backs and backstops can fit on as little as 15 acres. 14-, 42- and 56-target field range size requirements are proportional to the 28-target requirement, considering that about two acres is needed for a nice practice range, and about one acre is needed for the parking lot and building(s). For initial planning purposes, a *rule-of-thumb is one acre per target*.

II.C. Target Archery Range

Outdoor target archery range size requirements are easy to define because: (1) terrain is not a factor, and (2) all targets are walk-backs. Factors relating to a "first class" outdoor target range layout are:

- The ground should be flat, free of obstructions, and the shooting direction should be within 45° of true north in the Northern Hemisphere (shooter less likely to face sun).
- Each shooting lane should be no narrower than 10 feet or about 3 yards.
- Safety (buffer) lanes along the side boundaries should be no less than 15 yards.
- The safety area behind the target at the longest distance should be no less than 40 yards.
- Five yards minimum is recommended behind the shooting line for the competitors, plus at least another 5 yards for bow racks, chairs, etc.

Therefore, a 10-target NFAA 900 Round or American Round target range requires, at a minimum:

- \bullet Width = (10 x 3) + 15 + 15 = 60 yards.
- \bullet Length = 5 + 5 + 60 + 40 = 110 yards.

This 10-target range requires less than 1½ acres, of the right shape. It would fit nicely on a standard soccer or football field, including side and end zones.

II.D. Bowhunter Range

As with field archery ranges, the actual land area required between the shooting stakes and targets is a small fraction of the total bowhunter range area required. Although the distances shot on a bowhunter range average less than those shot on a field range, there are several factors which make the total area requirements greater:

- Arrow speed as well as the probability of arrow ricochet are higher for the bowhunter than for the field archer, and since fabricated backstops are not desired (for the sake of realism), the safety zones should be at least twice the size suggested for a field range. Earthen backstops, however, either manmade or natural, will help quite a bit.
- Paths to and from the target should never be along the sight-line between the shooting stake and target. Again, for realism and fairness to all, more area is required to preserve the natural habitat behind and in front of the target.
- A bowhunter range is rarely shot the same way twice. That is, either the targets or stakes, or both, are relocated for each tournament. This practice obviously requires a land "reserve" not needed for a permanent range. [Remember, however, bowhunter ranges with permanent butts or manmade earthen backstops do not have the same freedom of relocating the targets for each shoot. Only the stakes can be moved.]
- Ideally, the animal targets should be matched with their habitats. If you use a large variety of targets, then you need a large variety of habitats; thus requiring more land area.

In summary, a rough estimate of the land area required for a bowhunter range is 50% more per target than for a field range. A typical field range requires about an acre per target; therefore; a typical unmarked bowhunter range needs about 1½ acres per target. Therefore, a 20-target range needs 30 acres minimum. The more the better, however.

SECTION III OUTDOOR TARGET BUTT AND BACKSTOP CONSTRUCTION

III.A. Field Archery

The minimum size requirements for field archery butts are based on the target faces being shot. For example, the following table relates butt dimensions with target configuration:

Distance	Critical Target	Minimum Butt Dimensions
Up to 15 yds	4 x 4 – 20-cm	36" x 36"
15 to 35 yds	2 x 2 – 35-cm	30" x 30"
35 to 40 yds	1 x 2 – 50-cm	30" x 42"
40 to 80 yds	Group 1 Animal	42" x 42"

Considering that a compressed bale of excelsior is about 15" x 15" x 42", two-bale butts are barely adequate for field targets from 15 to 40 yards (assuming no vertical Group 1 Animals). Butts three bales high are required for the "snake eyes" and all target distances 40 yards and greater. Butts four feet square are amply sized for both field and target archery.

It wasn't too long ago that excelsior was the most common target butt material. Today, however, there are literally hundreds of different materials available worldwide, including various fibrous natural materials, forest or agricultural by-products, bundled rags and recycled plastic, but mostly a wide variety of the more expensive castable or moldable foams and composite materials. Moreover, the trend seems to be toward the purchase of commercial, full-sized, pre-fabricated, target butts.

A medium cost compromise is the do-it-yourself fabrication using cardboard, insulation board, or any one of many sheet foam materials, stacked and compressed in a custom made screw-down frame. Foams have several advantages: (1) they're available in a variety of thicknesses and densities, (2) they can be cut to any size or shape, and (3) they're both weather-proof and varmint-proof. Unfortunately, some foams have great "grabbing power," making it difficult to extract the arrows; plus, some foams tend to "goop up" arrow shafts, especially those made of composite materials.

Although the target butt may be waterproof, ordinary paper target faces need protection from the rain, especially if they're to be shot more than one day. A simple roof over the butt will suffice. The roof should be a little higher than six feet from the ground (to allow for head clearance), and about four feet wide.

Unlike indoor archery, there is no minimum height above the ground for field archery target faces. Since a standard wooden pallet is the most common base, about 5 inches is the practical minimum. A platform about 16 inches above the ground is much better, since the center of the target would then be about waist-high, making it easy to score and extract arrows

The butt platform, roof and supporting posts should be made from materials that won't damage an errant arrow. Ordinary pressure-treated pine is good. If steel fence posts are used to hold the butt upright, then keep the posts at the edges, but behind the butt out of sight. It is also a good idea (and welcomed by all novice shooters) to keep the ground around the butts free of rocks and large stones, especially at targets longer than 50 yards.

With a little luck and ingenuity, a two-bale excelsior target butt, with platform and roof, can be constructed for less than \$100, excluding labor and equipment purchase or rental.

As noted above, unnatural target backstops are not desired on a field archery range unless dictated by safety concerns. Besides, fabricated backstops are eyesores, and can be quite expensive, unless natural materials, such as stacked logs, can be used.

A rule-of-thumb for backstop size is three butt-widths wide and two butt-heights high. For example, a backstop behind a 4 x 4-ft butt would be 12-ft wide by 8-ft high. That equates to three, 4 x 8-ft, $\frac{1}{2}$ -in (or thicker), exterior-grade, plywood panels mounted vertically. Of course, other materials are available. The only requirement is that the backstop must decelerate the arrow to zero, without substantial damage to the arrow, and without endangering anyone on or off the range.

III.B. Target Archery

A few years ago, the most common butt used for outdoor target archery was the classic, circular, 50-inch diameter, grass butt. These heavy and expensive butts, however, may no longer be in production. Square butts made of the newer, lighter weight, foam or composite materials are now much more popular, and are sized to hold the standard 122-cm FITA face. Light weight and portability are also desired to accommodate those tournaments where the shooting line remains fixed while the butts and their standards (easels) are moved as the distances are changed.

Target butts similar to those used on a field archery range may also be used, as long as portability is not required, and if the butts are sufficiently large to hold a standard 122-cm FITA face. Moreover, FITA faces are mounted such that the center is about 50 inches above ground, and tilted about 15° from vertical. For target rounds other than the 900 or American Round, common sense prevails. *Obviously, kids shooting target archery at summer camp need targets sufficiently low to reach their arrows*.

Backstops are rarely required on a target archery range primarily because all the archers are shooting at the same time, and no one is allowed behind the targets except when all are scoring their arrows. Likewise, spectators must be clear of the safety zone behind the targets.

III.C. 2-D Animal Targets

If required, target butts and backstops needed for a two-dimensional animal round, such as the WBHC Compulsory Round, are the same as those used on a field archery range.

Broadhead target butts and backstops are not addressed herein.

III.D. 3-D Animal Targets

A wide variety of very durable and realistic three-dimensional animal targets are now commercially available. The more popular brands have standard scoring lines engraved, and have replaceable sections, plugs, and/or back-up blocks for do-it yourself target refurbishment.

Reasonably realistic semi 3-D animal targets can also be handmade. A full-sized, color-printed, paper, animal target is glued on cardboard, and backed-up by an ethafoam (or similar) slab. The complete target is then cut out around the animal outline.

3-D animal targets are generally very portable, which means that a completely different bowhunter range can be set-up overnight. Some targets even have integral support stakes, while others are merely tied to any convenient tree or sapling.

The price of these 3-D animal targets is heavily dependent on size, realism and durability; and whether you buy or make them.

SECTION IV OUTDOOR RANGE FACILITIES AND ACCESSORIES

IV.A. <u>Items Any Archery Range Can Use</u>

- Adequate parking area.
- Covered shelter, pavilion or clubhouse.
- Registration table or counter.
- Storage shed for spare targets, butts, stakes, target pins, tools, etc.
- Picnic tables and benches
- Scoreboard.
- Toilet facilities (primitive, portable or otherwise).
- Practice area (covering longest distances on actual range).
- Bow racks, at both practice area and registration area.
- Bulletin board for target assignments, tournament rules, and other announcements.
- Public address system, at least for large tournaments.
- Waste containers.
- Water jugs and cups, throughout the range.
- Concession area.
- ♦ WARNING! ARCHERY RANGE signs around range boundary

IV.B. Field Archery Range Items

- Bow racks at each target butt
- Direction signs.
- Target number and target distance signs.
- Benches, at least five yards behind farthest shooting stake.

IV.C. <u>Target Archery Range Items</u>

- Portable bow racks behind shooting line
- Target number placards.
- Wind direction indicators.
- Chairs and beach umbrellas, if not provided by the competitors
- Timing lights.
- Tournament Director's platform.

IV.D. Bowhunter Range Items

- "On Deck" area, at least ten yards behind the next target's shooting stake
- Trail markers (signs, cord or tape).
- Target number and description signs (post in "On Deck" areas).
- Novelty event set-up, such as running deer, long-distance shoot, archery poker, etc.

SECTION V DESIGNING AN OUTDOOR RANGE FOR SAFETY

V.A. General Range Safety

Safety on any archery range is comprised of three elements:

- Archery tackle.
- ◆ "Stupid Human Tricks."
- Range layout, targets and backstops.

Only the last item is discussed herein, and only for field archery and bowhunter ranges. Since target archery range layouts and shooting rules are specifically structured to avoid unsafe conditions, safety issues are fairly rare. Likewise, proper archery training and/or bowhunter education should handle the tackle and human elements.

It should be remembered that range design criteria can't be separated from range safety criteria. *The first priority is* — *always* — *every archery and bowhunter range must be designed for safety.* The following material, therefore, emphasizes the most important safety issues related to the range and equipment design criteria outlined in the foregoing Sections II, III and IV.

V.B. Field Archery Range Safety

Field archery range safety may be divided into two categories: (1) factors related to range layout and terrain, and (2) factors related to maintainable items, such as target butts, target lanes and lane obstructions. The NFAA addresses both of these factors quite well in its Range Inspection Requirements. NFAA-chartered clubs with field ranges must be re-inspected every two years, and it's obvious that a club won't host many tournaments, invitationals or even club shoots, without being certified safe, and subsequently proven safe by repeated use.

The problem, unfortunately, is with temporary ranges set up specifically for large sectional or national tournaments. This problem is the result of (1) too many ranges being built on not enough land, (2) not enough help, and (3) not enough time. Very few ranges are perfectly safe the first time, which means that unless inspection teams conduct a "shoot-through" on the new range, there's a good chance that *there will be a significant safety issue* during the first day's round. Here's a summary of the kind of things often missed because of not having a "shoot-through":

- Waiting areas and shooting positions at the next target within the danger zone of the preceding target. This is the result of not having enough land. The NFAA's outdoor range safety guidelines, as described above, are good rules-of-thumb.
- Target butt positioned such that a road, path or another target is directly behind the butt, even if at a reasonably safe distance. *Any* unnatural movement in the sight window can cause an equally unnatural flinch and inadvertent arrow release.
- Lack of backstop or inadequately cleared area behind target butt. People will miss, and they will look for that missed arrow. Uncleared brush not only increases the chance of a ricochet, but it also increases the exposure of the search party to danger zones behind other targets.
- Leaky butts. Even if you never miss, pass-throughs put you in the same position as the guy who
 does miss the target.
- Non-backstopped target positioned on a brow of a hill, such that a missed shot becomes a flightshot.
- Uncleared paths to and between targets. Here, we're talking about safety afoot. The usual method

RangeGL000501.doc

- of clearing field archery lanes is to brush-hog the saplings about one or two inches above the ground just high enough to trip head-over-heels.
- Inadequate clearance above target lane. Even with a "shoot-through," the range inspectors often miss the fact that light-bowed and traditional shooters require more vertical clearance.
- Walk-ups which are also fan shaped. The problem here is that unlike a straight walk-up, an angled walk-up often gives the option of shooting four at a time. It depends on the angle of the fan whether this is safe or not. If there's any question, don't shoot!

V.C. <u>Bowhunter Range Safety</u>

Here are some problems unique to bowhunter ranges, some of which are noted elsewhere here:

- Non-yielding obstructions (e.g., trees and limbs) blocking the animal kill area. When setting up a 3-D target, don't make the shot any different from that you would take in a real hunting situation. Moreover, remember the short person, the lefthander and the light-bowed bowhunter.
- Overlapping "miss" areas behind the targets. Because of no backstops and because of more missed shots (at 3-D targets), special care must be taken to make sure that a missed arrow doesn't end up behind another target.
- Steeplejack treestand shots. Shooting from elevated platforms is fun (although often bottlenecks), but don't make the shots ridiculously difficult like hanging out over the railing. Also, make sure that the bow limb won't slap any part of the tree or platform upon release.
- Again, the "On Deck" area and shooting stakes at the next target being in the danger zone of the
 preceding target. The NFAA's safety buffer rule is even more important on a bowhunter range,
 especially if it's heavily wooded (more ricochets)

SECTION VI SUMMARY OF INDOOR ARCHERY GAMES

VI.A. NFAA/IFAA Indoor Round

VI.A.1. Standard Unit

A standard unit consists of 60 arrows at 20 yards. NFAA cubs shoot at 10 yards. Normally, this round consists of 12 ends at 5 arrows per end, but the NFAA allows the option of 15 ends at 4 arrows per end.

VI.A.2 Targets

- **VI.A.2.a.** "Single-Spot" Target. This target face is 40 cm in diameter and is dull blue with a white center spot. The spot is 8 cm in diameter with a 4-cm X-ring. The spot is scored as a 5 while the X-ring is used for tie-breaks only. The diameter of the 4-ring is 16 cm, 3-ring 24 cm, 2-ring 32 cm, and the 1-ring 40 cm.
- VI.A.2.b. "4-Spot" and "5-Spot" Championship Targets. These target faces consist of either four (NFAA only) or five (NFAA and IFAA) 16 cm targets on a single, 40-cm, screened blue surface. Scoring is the same as the single-spot target; however, there are no 3-, 2- or 1-rings to score. These "one-arrow-per-target" optional target faces are designed for the precision shooter who wishes to avoid glance-outs or damaged arrows.
- VI.A.2.c. Target Set-Up. Normally, four target faces are mounted side-by-side, top-to-bottom on each target butt. This allows two archers per butt per line. Line 1 shoots the bottom targets, while Line 2 shoots the top targets.

VI.B. Vegas Round

The Vegas Round is shown here only because it is the indoor round shot at the annual, and very popular, World Archery Festival (WAF), now owned and managed by the NFAA. Because of its popularity, it is often a round shot at many local indoor tournaments and leagues

A standard unit consists of 10, 3-arrow ends at 18 meters (about one foot short of 20 yards). Adults shoot three of these units at the WAF for a perfect score of 900. The Vegas target face is the same as the indoor FITA "triple face." Each triple target is merely the 20-cm center portion of the 40-cm FITA face. That is, there's two gold rings (plus X-ring), two red rings and one (inner) blue ring.

SECTION VII INDOOR RANGE LAYOUT AND SIZE REQUIREMENTS

VII.A. Shooting Distances

The most common indoor shooting distance is 20 yards maximum, which encompasses the 18 meters used at the World Archery Festival, as well as at most FITA and JOAD indoor tournaments.

Total depth of an indoor range is the maximum shooting distance, plus, of course, the clearance distances needed behind both the shooting line and the target butts. Normally, a minimum clearance of 5 feet is required behind the butts to allow for a backstop, as well as sufficient "elbow room" to retrieve arrows which may have passed through the target butts. Clearance behind the shooting line should not be less than about 15 feet to allow room for bow racks, benches, tables, traffic, etc. Ten yards (30 feet) is much more desirable.

Therefore, a "standard" 20-yard indoor archery range requires a total depth of nominally 80 feet. A depth greater than 80 feet will permit either more "roaming" room or greater shooting distances.

VII.B. Lane Width and Side Clearance

The absolute minimum lane width is 24 inches. For "mature" adults, however, 30 inches is much better. Of course, the target butts must be spaced accordingly. For two lanes per butt, the 30-inch lane means that the butt centerlines are 5 feet apart. The 24-inch lane means that the nominally 48-inch butts are touching side-by-side.

The NFAA requires that, "All pillars or structural parts of the building, ... shall be properly protected so as not to damage arrows and to prevent rebound to the shooting lines."

VII.C. Height Clearance

For a 20-yd range, the NFAA requires a minimum vertical clearance of 8 feet, 6 inches. For kids with light bows, 10 feet is probably better. This clearance is between the floor and *anything* hanging from the ceiling in the line-of-fire, such as structural beams or light fixtures. Obviously, light fixtures immediately above the target butt are not in the line-of-fire, and only need to be head-height.

VII.D. Overall Range Dimensions

Assuming 5 feet per target butt (two lanes), a 30-foot wide range will support 12 lanes, or 24 people in two shooting lines of league play. Widths greater or less than 30 feet should be divisible by 5 feet (or slightly less) in order to accommodate whole units of target butts. Obviously there is no minimum or maximum range width requirement ... only what's affordable.

In addition to both the 80-foot depth requirement and the recommended 30-foot minimum width, sufficient floor space should be allocated for:

- ♦ An entry area.
- Registration counter (or cashier).
- Score tallying and posting area.
- ♦ Restroom(s).
- Heating and/or air conditioning facilities.
- Utility, storage and/or office area.
- Designated smoking area.
- Pro shop or retail sales area.

SECTION VIII INDOOR TARGET BUTT AND BACKSTOP CONSTRUCTION

VIII.A. Target Butt Dimensions

If square or rectangular, the width or height of a target butt shall not be less than 40 inches. 48 inches is preferred; and if a circular butt is used, the minimum diameter shall not be less that 48 inches. Butts of these sizes will hold four NFAA/IFAA or WAF target faces.

NFAA requires that the bottom of the target butt be at least 16 inches from the floor.

For easel-mounted butts, the backward tilt cannot be more than 15° from vertical, and the tilt-angle must be the same for all butts used in a tournament. A perfectly vertical target face is ideal, but care must be taken to avoid having the butt pitch forward during arrow removal.

The thickness of a target butt should be no greater than the length of the shortest arrow. A completely buried "pass-through" is almost impossible to extract.

VIII.B. Target Butt and Backstop Materials

As with outdoor target butts, an indoor target butt may be constructed of any material as long as:

- ♦ It doesn't damage or "goop up" the arrows.
- It doesn't allow frequent pass-throughs.
- It allows the arrows to be withdrawn easily, or at least without much effort.

Excelsior, corrugated cardboard and sheet sheets are the most common materials used for "permanent" indoor target butts. Although cardboard is relatively inexpensive, especially if scrap can be found, a frame must be constructed for each butt to hold the compressed cardboard sheets in a neat vertical stack.

As with outdoor butts, a variety of foam materials are also suitable for indoor use. Portable versions on

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standards (easels) are quite popular at the large, arena-sized, indoor tournaments. Unfortunately, some of these foams have great "grabbing power," making it difficult to extract the arrows. Other foams tend to leave a messy residue on the arrow shafts.

An indoor target backstop may be made of any material as long as it doesn't damage any pass-through, overshot or sideshot arrow. The NFAA requires the backstop to be at least 8 feet high. Standard sheets of (thick) plywood, butted side-by-side, are commonly used as backstops. For large tournaments in temporary facilities, a curtain-like, closed-mesh fabric backstop is also common.

SECTION IX INDOOR RANGE LIGHTING, ACCESSORIES, SPECIAL EQUIPMENT AND SAFETY

IX.A. Lighting

The minimum illumination recommended is 30 foot-candles, measured at the target faces. 30 foot-candles throughout the range is good; however, care must be taken to shield the shooters' eyes while standing at the shooting line. On the other hand, there must be sufficient illumination at the line for reading sight marks and doing other close work.

Fluorescent overhead light fixtures are recommended because of the uniform illumination and lack of harsh shadows. Floor-mounted fixtures in front of the butts are sometimes used to augment target illumination. Special precautions, however, are advised to avoid tripping over these fixtures on the way to and from the target butts.

IX.B. Routine Indoor Range Accessories

Items needed for both drop-in and league shooters include:

- Bow racks. These must be located at least 5 feet behind the shooting line. Remember to provide enough racks to handle a full-house of shooters (two times the number of lanes). Also, remember that many bows have extra long stabilizers and/or extra short limbs.
- Equipment tables. Places are needed to store tackle boxes and to assemble/repair archery tackle. Inexpensive, folding, "cafeteria" tables are quite adequate.
- ♦ Chairs or benches. These, along with the tables noted above, should be located behind the bow racks, and should provide sufficient seating for the expected number of spectators, plus at least one-half the number of shooters.
- ♦ Coat racks or hooks.
- Water fountain, restroom(s), designated smoking area, etc.

IX.C. Specific Items Needed for Indoor Leagues and Tournaments

Some things that may or may not be provided by league or tournament sponsors include:

- ♦ A 10-foot "dropped arrow" line.
- ♦ Visual timer. Depending on the tournament, a stoplight-like timer is usually required. Green is for **START SHOOTING**, amber is for **ONE MINUTE TO GO**, and red is for **STOP SHOOTING**. The timer may be overridden by a tournament official behind the shooting line.
- Raised platform behind the shooting line for the Tournament Director and Clock/Timer Operator.
- Scorecards and scoreboard.
- Target faces.

IX.D. Some Special Safety Precautions for Indoor Ranges

Some additional common sense safety rules include:

- Never let anyone draw a bow, with or without an arrow, except while standing at the shooting line and pointed toward a clear target.
- Never allow crossbows or bows with unguarded overdraws to be shot in an indoor archery range.
- Never let anyone shoot obviously damaged or defective equipment.
- Unless the range is specifically designed for it, never allow broadheads to be shot indoors.

SECTION X DESIGNING A RANGE FOR WHEELCHAIR ACCESSIBILITY

X.A. Types of Physically Disabled Archers

Disabled archers participating in the 1996 Paralympics were separated into three classes:

- Quadriplegic Requires wheelchair at all times on the range, and can use specially adapted archery tackle.
- ◆ Paraplegic Requires chair (not necessarily wheelchair) at the shooting line. No provision for special tackle.
- ♦ Standing Has the ability to stand at the shooting line, but requires assistance (prosthesis, crutch, wheelchair, etc.) to move around the range.

"Wheelchairs" come in various classes, too. The motorized versions with small balloon tires are ideally suited for all outdoor archery games. The classic, narrow-wheeled, manual wheelchairs are best suited for indoor shooting or on "soccer field" target ranges.

X.B. Indoor Ranges

Assuming that the building is already wheelchair accessible, nothing special is needed for an indoor range, except to provide more maneuvering room behind the shooting line. Also, since a wheelchair requires extra lane width at the shooting line, it's customary not to have two shooters on the same butt. This custom applies to target archery, too.

X.C. Outdoor Target Ranges

Because of the flat terrain, outdoor target archery ranges require very little modification for the wheelchair archer. Narrow-wheeled wheelchairs, however, just don't work in sand, loose soil or gravel. Unless some assistance is provided in scoring and retrieving the shooter's arrows, lanes to the target must also be hard packed and free of obstructions (rocks, stumps, etc.).

X.D. Field Archery and Bowhunter Ranges

Designing for *manual* wheelchair accessibility on roving-type archery ranges is most challenging. Here are the general design criteria:

- Grade less than 10% (about 6°).
- Avoid walk-through target arrangements.
- Hard packed soil.
- Lanes and paths clear of rocks, brush, stumps, etc.
- Extra wide shooting lanes.
- All bridges wheelchair accessible and wheelchair-safe.
- Other accessibility features in place, such as restrooms, etc.

Because of the desire to have both a varied target layout and natural habitat realism, a bowhunter range with manual wheelchair accessibility is almost improbable. As noted above, if the terrain is very flat, or if the disabled archer can use an ATV (and has a buddy to help score and retrieve arrows), then the challenge to hold a wheelchair accessible 3-D Round is somewhat lessened.

Alternately, and if cost is of little concern, an 100% accessible wheelchair bowhunter range can be (and has been) built. It's possible to have easy access to the 3-D animal targets (to retrieve arrows), and to even have elevated platforms (simulating treestands or downhill shots). With paved paths (or boardwalks), fabricated ramps, and targets fixed in-place, some realism is obviously lost. The fun, however, is never lost.